

# POWERING THE WORKPLACE

## PRODUCT GUIDE



CATALOGUE  
PAGES  
INSIDE

# Global strength built on local knowledge

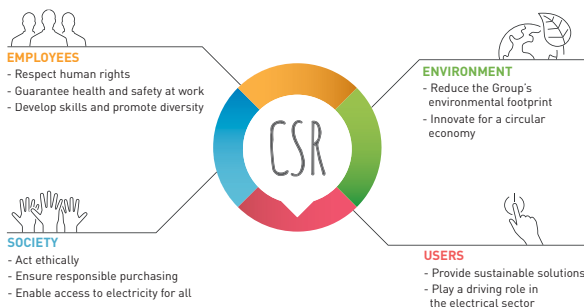
Legrand is the global specialist in electrical and digital building infrastructures. Innovation is the driving force behind its development.

With an increasing investment in research and development (circa 5% of sales) and more than 4,000 active patents, the Legrand Group is focused on maintaining a high rate of new product launches that present innovative solutions to the market.



## CORPORATE SOCIAL RESPONSIBILITY

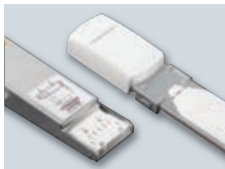
Legrand's 2014-2018 CSR roadmap is a natural extension to the governance and sustainable development approach in which the company has been engaged for many years. The CSR roadmap firmly asserts Legrand's ongoing commitment to sustainable development.



## LEGRAND'S POWER DISTRIBUTION BUSINESS UNIT

From Zucchini transformers, through high power distribution and rising main busbar to Electrak powertrack, desk modules and lighting control, Legrand's power distribution business unit provides market leading solutions to the increasing demands of today's buildings.





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# ELECTRAK<sup>®</sup>

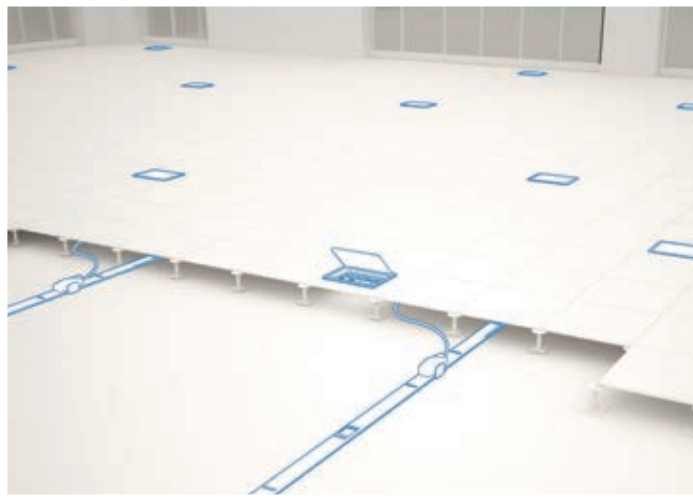
the specialist in power  
distribution throughout the  
**workplace**



Electrak, a brand of the Legrand Group in the UK, is a leading name in power distribution and lighting control solutions.

Electrak busbar systems, floor boxes, floor grommets, desk modules and lighting control ranges are installed in high specification offices around the world.

# Powering the workplace



## UNDERFLOOR POWER

Electrak's powertrack system is perfect for supplying underfloor power in cavity floor installations. With minimal parts, push-fit assembly and a complementary range of floor boxes, this flexible, easy-to-install system can be reconfigured as office layouts evolve.



POWERTRACK  
See page 6



CAVITY FLOOR BOXES  
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## WORKSTATION POWER

Electrak's access grommets provide the gateway for power to feed from the underfloor powertrack network to the workstation, where all desk power requirements are met with our new range of desk modules, Intersoc-R and Intersoc on-desk.



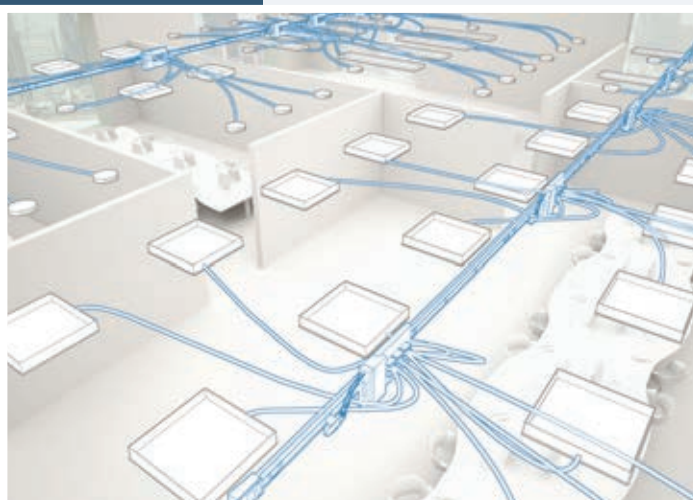
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INTERSOC-R  
See page 36



INTERSOC ON-DESK  
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## FULLY ADDRESSABLE LIGHTING CONTROL

Designed to work in harmony with Buscom trunking, Lightrak lighting control offers high-end sophistication with unbeatable flexibility and speed of installation.



BUSCOM  
power and data backbone  
See page 54



LIGHTRAK  
lighting control system  
Visit: [www.legrand.co.uk](http://www.legrand.co.uk)

# ELECTRAK<sup>®</sup>

## UK manufacturing Global recognition



### OVER 30 YEARS' EXPERIENCE

Legrand's cost-effective Electrak systems have been designed and manufactured to distribute power and data reliably and safely throughout the workplace. The original underfloor busbar system, invented by Electrak in the 1980s, sets the benchmark for flexible power distribution.

### INDUSTRY EXPERTS

As part of its ongoing commitment to research and development, Legrand continually evolves its product ranges to ensure it develops the best and most innovative solutions available on the market. Legrand takes pride in its enviable reputation for market leading customer service, industry knowledge and product expertise.



# TRUSTED

THROUGHOUT THE UK AND ACROSS THE WORLD



## UNITED KINGDOM

- Morgan Stanley, Canary Wharf
- Media City, Manchester
- JP Morgan, Canary Wharf
- RBS, Edinburgh
- Bridgewater Place, Leeds
- Network Rail, Nationwide
- Swiss Re, City of London
- Amazon, Swansea
- Heathrow Airport, London
- Snow Hill, Birmingham
- Barclays Capital, Canary Wharf
- Temple Back, Bristol
- Standard Chartered Bank, City of London
- London Underground
- BBC, White City
- Mann Island, Liverpool



## MIDDLE EAST & INDIA

- ADMA-OPCO HQ, Dubai
- Internet City, Dubai
- Burjuman Centre, Dubai
- ADIC/Al Bahr Towers, Abu Dhabi
- Al Dar HQ, Abu Dhabi
- Central Bank of Kuwait
- Ministry of Education, Kuwait
- PIFFS Aridya, Kuwait
- PAAET, Kuwait
- Qatar News Agency
- Barclays, Chennai, India
- Barclays, Pune, India
- Barclays, Andheri, India
- Barclays, Mumbai, India
- RBS, Delhi, India
- Fidelity, Delhi, India



## ASIA PACIFIC

- Deutsche Bank, ICC I, Hong Kong
- Customs Headquarters, North Point, Hong Kong
- Citi Bank Tower, Hong Kong
- Macquarie Bank, IFC I, Hong Kong
- UBS Bank, IFC II, Hong Kong
- JP Morgan, Hong Kong
- Nomura Bank, Marina Bay, Singapore
- Credit Suisse, Singapore
- ABN Amro, One Raffles Quay, Singapore
- RBS, One George Street, Singapore
- Barclays Capital, Shanghai
- Standard Chartered Bank, Shanghai



## QUALITY ASSURED UK MANUFACTURING



With its Electrak ranges manufactured from its UK base situated in the North East of England, Legrand can provide a rapid production response and adapt to ever-changing project demands. Having total production control also helps ensure our quality meets the highest standards.

## BUILDING INFORMATION MODELLING

As part of Legrand's ongoing commitment to supporting construction, we have integrated a number of ranges into the BIM environment to assist all areas of project activity, from design and construction through to facilities management and beyond.

Autodesk Revit files are now available for Electrak powertrack, floor boxes and Buscom trunking.

**Download Revit files at: [www.legrand.co.uk](http://www.legrand.co.uk)**



# POWERTRACK

adaptable, reliable

underfloor power



## THE INDUSTRY STANDARD IN UNDERFLOOR POWER

Electrak powertrack / underfloor busbar is perfect for cavity floor installations. With minimal parts, push-fit assembly and a complementary range of floor boxes and grommets, this flexible, easy-to-install system can be reconfigured as office layouts evolve.

The system consists of continuous lengths of track which are fed via a feed unit and can be installed in floor voids as low as 48mm.

- 63 A rated, IP 40 protection
- Available in five versions: single phase, clean earth, dual circuit, three phase and auxiliary earth
- Tinned busbar version available for use within Abu Dhabi (see page 15)
- Available in 1.2m, 1.8m, 2.4m and 3.6m lengths
- Tap-off outlets are located at every 300 or 600mm pitch
- Floor mountable (stand-off brackets also available)



Integral track connector plugs into feed unit



Lengths simply push-fit together



Integral fixing brackets for rapid installation







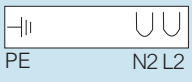

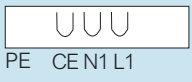

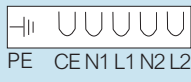



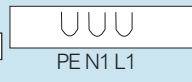


Tap-offs plug into shuttered socket outlets and lock onto track body

# Electrak® powertrack / underfloor busbar system

## selection chart

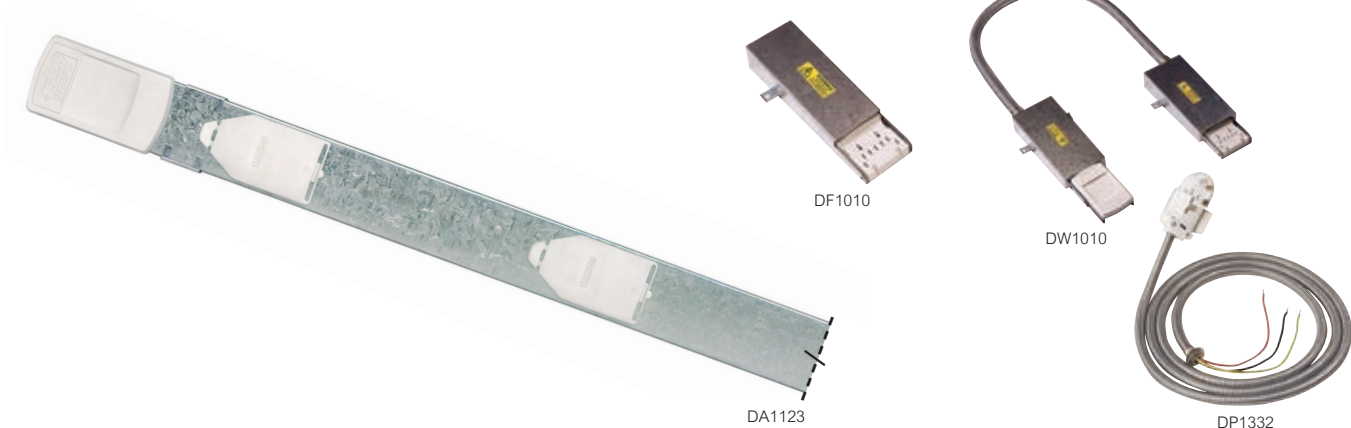
	Description	Length (m)	
<b>Track lengths with 300 mm socket centres</b>			
	4 outlets	1-2	
	6 outlets	1-8	
	8 outlets	2-4	
	12 outlets	3-6	
<b>Track feeds</b>			
		-	
	Excluding cables and conduit		
	Flexible metal conduit		
	Flexible metal conduit		
<b>Standard tap-off / auxiliary earth tap-off</b>			
	32 A unfused 16 mm Ø L, N, PE	3	
		5	
	13 A fused 16 mm Ø L, N, PE	3	
		5	
	13 A 543-7 fused 16 mm Ø L, N, PE	3	
		5	
<b>Low noise / clean earth tap-off</b>			
	32 A unfused 16 mm Ø CE, L, N, PE	3	
		5	
	13 A fused 16 mm Ø CE, L, N, PE	3	
		5	
	13 A 543-7 fused 16 mm Ø CE, L, N, PE	3	
		5	
<b>Dual circuit tap-off</b>			
	32 A unfused 20 mm Ø CE, L1, N1 L2, N2, PE	3	
		5	
<b>3 phase tap-off</b>			
	32 A 415 V 3 phase 20 mm Ø L1, L2, L3, N, PE	3	
		5	
	32 A L1 unfused reconfigurable live pin 16 mm Ø L1, N, PE	3	
		5	
	32 A L2 unfused reconfigurable live pin 16 mm Ø L2, N, PE	3	
		5	
	32 A L3 unfused reconfigurable live pin 16 mm Ø L3, N, PE	3	
		5	
	Key code / Busbar arrangement		

	<b>ELECTRAK 24</b> Standard system (white)		<b>ELECTRAK 25</b> Low noise / clean earth system (green)		<b>ELECTRAK 26</b> Dual circuit system (dark green)		<b>ELECTRAK 27</b> 3 phase system (grey)		<b>ELECTRAK 28</b> Auxiliary earth system (red)
	DA1123		JA2123		KA3123		NA4123		YA5123
	DA1183		JA2183		KA3183		NA4183		YA5183
	DA1243		JA2243		KA3243		NA4243		YA5243
	DA1363		JA2363		KA3363		NA4363		YA5363
	DF1010		JF2010		KF3010		NF4010		YF5010
	DW1000		JW2000		KW3000		NW4000		YW5000
	DW1010		JW2010		KW3010		NW4010		YW5010
	DW1020		JW2020		KW3020		NW4020		YW5020
	DP1332		–		DP1332		–		YP5332
	DP1532		–		DP1532		–		YP5532
	DP1313		–		DP1313		–		YP5313
	DP1513		–		DP1513		–		YP5513
	DP1327		–		DP1327		–		YP5327
	DP1527		–		DP1527		–		YP5527
	–		JP2332		JP2332		–		–
	–		JP2532		JP2532		–		–
	–		JP2313		JP2313		–		–
	–		JP2513		JP2513		–		–
	–		JP2327		JP2327		–		–
	–		JP2527		JP2527		–		–
	–		–		KP3328		–		–
	–		–		KP3528		–		–
	–		–		–		NZ4331		–
	–		–		–		NZ4531		–
	–		–		–		NP4332 <sup>1</sup>		–
	–		–		–		NP4532 <sup>1</sup>		–
	–		–		–		NP4302 <sup>1</sup>		–
	–		–		–		NP4502 <sup>1</sup>		–
	–		–		–		NP4303 <sup>1</sup>		–
	–		–		–		NP4503 <sup>1</sup>		–
									

1 : All NP tap-offs are reconfigurable between L1, L2 or L3 for 3 phase track

# Electrak® 24 powertrack / underfloor busbar system

standard system (white)



Selection charts **p. 8-9**  
Dimensions and technical information **p. 18-23**

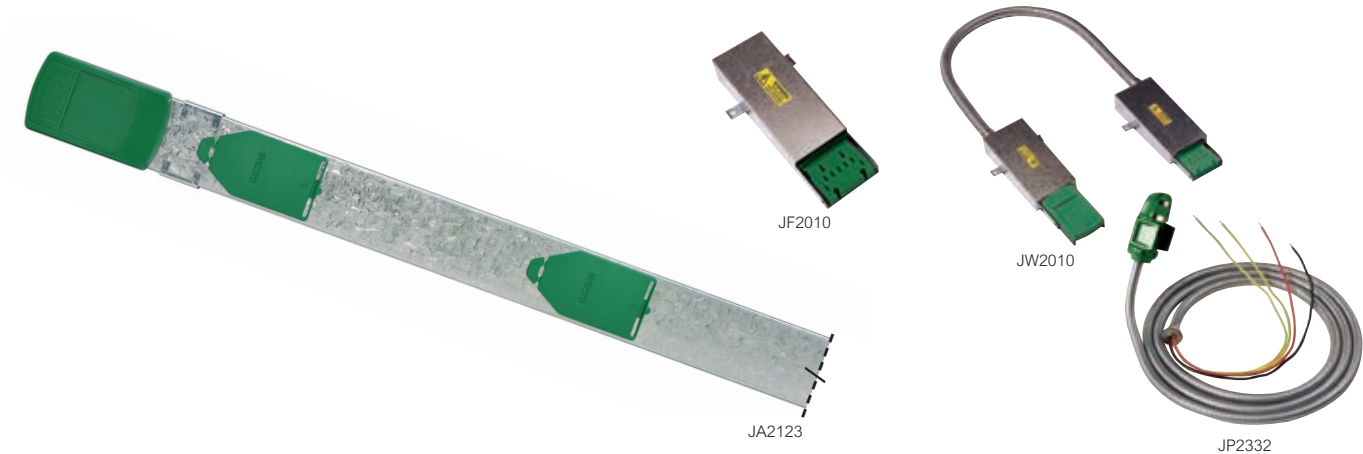
Approved to ASTA Standard 138 and ISO 9001 : 2008  
Conforms to BS EN 61534-22 : 2014. Fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations  
A compact system that can be installed in floor voids as low as 48 mm

Pack	Cat. Nos.	Track system components	Pack	Cat. Nos.	Tap-off units
		<p><b>Electrak 24 standard track lengths</b></p> <p>Track lengths fit together using the integral connectors on each length Track lengths should always be secured using the integral floor fixing brackets 300 mm socket centres</p>			<p>Tap-off length is determined by the cable and not the conduit length, e.g. a 3 m tap-off has 3 m of cable and 2.6 m of flexible metal conduit<sup>1</sup> Tap-off units in excess of 3 m should only be used if they contain a fuse or if the powertrack is protected by a protective device not exceeding 32 A</p>
1	DA1123	1.2 m, 4 outlets, 2 floor fixing brackets			<p><b>32 A unfused</b></p> <p>16 mm Ø, L, N, PE</p>
1	DA1183	1.8 m, 6 outlets, 2 floor fixing brackets	1	DP1332	3 m
1	DA1243	2.4 m, 8 outlets, 2 floor fixing brackets	1	DP1532	5 m
1	DA1363	3.6 m, 12 outlets, 3 floor fixing brackets			<p><b>13 A fused</b></p> <p>16 mm Ø, L, N, PE</p>
		<p><b>Track feed unit</b></p> <p>DF1010 With one 25 mm diameter hole suitable for MICC, armoured cables or single core cables in conduit</p>	1	DP1313	3 m
		<p><b>Flexible interlinks</b></p> <p>Can be used to overcome obstructions or as corners where required</p>	1	DP1513	5 m
1	DW1000	Excluding cables and conduit			<p><b>13 A 543-7 fused - high integrity</b></p> <p>16 mm Ø, L, N, PE</p>
1	DW1010	1.2 m flexible metal conduit	1	DP1327	3 m
1	DW1020	2.4 m flexible metal conduit	1	DP1527	5 m
		<p><b>Special fixing brackets</b></p> <p>Required when track is raised off surface level Brackets raise track by 21 mm and should be spaced 600 mm apart</p>			<p><b>Tap-off units specifically for the U.A.E.</b></p> <p>To meet the local requirements, these tap-offs contain silver-flashed blades, larger 20 mm Ø conduits and minimum 4 mm<sup>2</sup> conductors</p>
1	DZ1210	For fitting under track body and track feed	1	DP1332R	3 m U.A.E.
1	DZ1230	For fitting under integral track connectors	1	DP1532R	5 m U.A.E.
					<p><b>32 A unfused</b></p> <p>L (red), N (black), PE (green/yellow)</p>
					<p><b>13 A fused</b></p> <p>L (red), N (black), PE (green/yellow)</p>
			1	DP1314R	3 m U.A.E.
			1	DP1514R	5 m U.A.E.

<sup>1</sup> : Tap-offs are supplied as standard with flexible metal conduit  
For alternative wiring solutions, contact us on +44 (0) 345 600 6266

# Electrak® 25 powertrack / underfloor busbar system

low noise / clean earth system (green)



 Selection charts **p. 8-9**  
Dimensions and technical information **p. 18-23**

Approved to ASTA Standard 138 and ISO 9001 : 2008  
Conforms to BS EN 61534-22 : 2014. Fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations  
A compact system that can be installed in floor voids as low as 48 mm

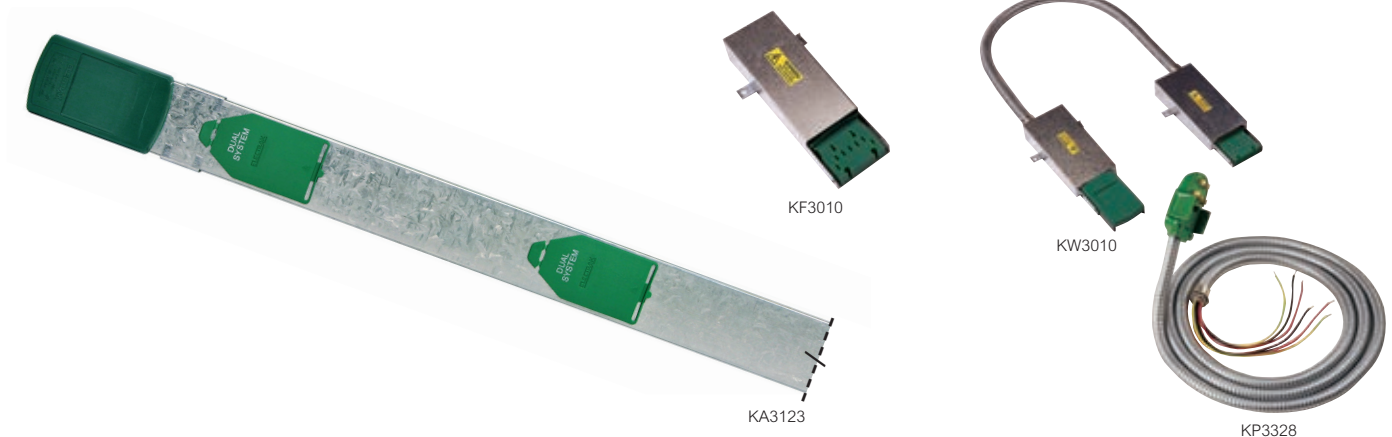
Pack	Cat. Nos.	Track system components
		<b>Electrak 25 low noise / clean earth track lengths</b> Track lengths fit together using the integral connectors on each length Track lengths should always be secured using the integral floor fixing brackets 300 mm socket centres
1	JA2123	1.2 m, 4 outlets, 2 floor fixing brackets
1	JA2183	1.8 m, 6 outlets, 2 floor fixing brackets
1	JA2243	2.4 m, 8 outlets, 2 floor fixing brackets
1	JA2363	3.6 m, 12 outlets, 3 floor fixing brackets
		<b>Track feed unit</b>
1	JF2010	With one 25 mm diameter hole suitable for MICC, armoured cables or single core cables in conduit
		<b>Flexible interlinks</b> Can be used to overcome obstructions or as corners where required
1	JW2000	Excluding cables and conduit
1	JW2010	1.2 m flexible metal conduit
1	JW2020	2.4 m flexible metal conduit
		<b>Special fixing brackets</b> Required when track is raised off surface level Brackets raise track by 21 mm and should be spaced 600 mm apart
1	DZ1210	For fitting under track body and track feed
1	DZ1230	For fitting under integral track connectors

Pack	Cat. Nos.	Tap-off units
		Tap-off length is determined by the cable and not the conduit length, e.g. a 3 m tap-off has 3 m of cable and 2.6 m of flexible metal conduit <sup>1</sup> Tap-off units in excess of 3 m should only be used if they contain a fuse or if the powertrack is protected by a protective device not exceeding 32 A
		<b>32 A unfused</b> 16 mm Ø, CE, L, N, PE
1	JP2332	3 m
1	JP2532	5 m
		<b>13 A fused</b> 16 mm Ø, CE, L, N, PE
1	JP2313	3 m
1	JP2513	5 m
		<b>13 A 543-7 fused - high integrity</b> 16 mm Ø, CE, L, N, PE
1	JP2327	3 m
1	JP2527	5 m

<sup>1</sup> : Tap-offs are supplied as standard with flexible metal conduit  
For alternative wiring solutions, contact us on +44 (0) 345 600 6266

# Electrak® 26 powertrack / underfloor busbar system

dual circuit system (dark green)



Selection charts **p. 8-9**  
 Dimensions and technical information **p. 18-23**

Approved to ASTA Standard 138 and ISO 9001 : 2008  
 Conforms to BS EN 61534-22 : 2014. Fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations  
 A compact system that can be installed in floor voids as low as 48 mm

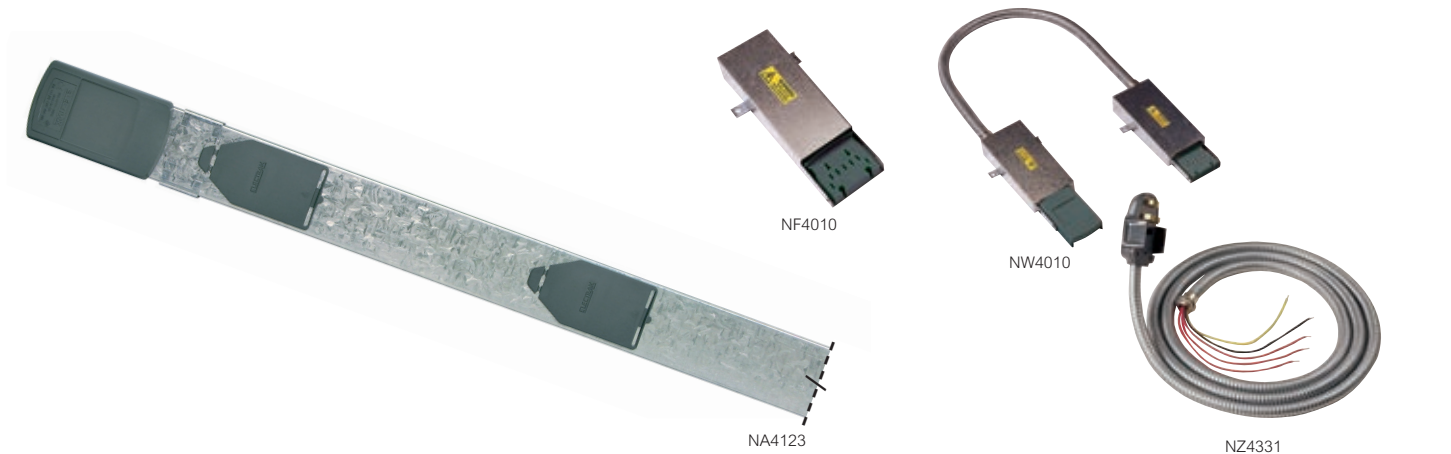
Pack	Cat. Nos.	Track system components
		The dual powertrack system has both standard and low noise / clean earth systems incorporated
		<b>Electrak 26 dual circuit track lengths</b>
		Track lengths fit together using the integral connectors on each length
		Track lengths should always be secured using the integral floor fixing brackets
		300 mm socket centres
1	KA3123	1.2 m, 4 outlets, 2 floor fixing brackets
1	KA3183	1.8 m, 6 outlets, 2 floor fixing brackets
1	KA3243	2.4 m, 8 outlets, 2 floor fixing brackets
1	KA3363	3.6 m, 12 outlets, 3 floor fixing brackets
		<b>Track feed unit</b>
1	KF3010	With two 25 mm diameter holes suitable for MICC, armoured cables or single core cables in conduit
		<b>Flexible interlinks</b>
		Can be used to overcome obstructions or as corners where required
1	KW3000	Excluding cables and conduit
1	KW3010	1.2 m flexible metal conduit
1	KW3020	2.4 m flexible metal conduit
		<b>Special fixing brackets</b>
		Required when track is raised off surface level
		Brackets raise track by 21 mm and should be spaced 600 mm apart
1	DZ1210	For fitting under track body and track feed
1	DZ1230	For fitting under integral track connectors

Pack	Cat. Nos.	Tap-off units
		Tap-off length is determined by the cable and not the conduit length, e.g. a 3 m tap-off has 3 m of cable and 2.6 m of flexible metal conduit <sup>1</sup>
		Tap-off units in excess of 3 m should only be used if they contain a fuse or if the powertrack is protected by a protective device not exceeding 32 A
		<b>Standard 32 A unfused</b>
		16 mm Ø, L, N, PE
1	DP1332	3 m
1	DP1532	5 m
		<b>Standard 13 A fused</b>
		16 mm Ø, L, N, PE
1	DP1313	3 m
1	DP1513	5 m
		<b>Standard 13 A 543.7 fused</b>
		16 mm Ø, L, N, PE
1	DP1327	3 m
1	DP1527	5 m
		<b>Low noise / clean earth 32 A unfused</b>
		16 mm Ø, CE, L, N, PE
1	JP2332	3 m
1	JP2532	5 m
		<b>Low noise / clean earth 13 A fused</b>
		16 mm Ø, CE, L, N, PE
1	JP2313	3 m
1	JP2513	5 m
		<b>Low noise / clean earth 13 A 543.7 fused</b>
		16 mm Ø, CE, L, N, PE
1	JP2327	3 m
1	JP2527	5 m
		<b>Dual circuit 32 A unfused</b>
		20 mm Ø, CE, L1, N1, L2, N2, PE
1	KP3328	3 m
1	KP3528	5 m

<sup>1</sup> Tap-offs are supplied as standard with flexible metal conduit  
 For alternative wiring solutions, contact us on +44 (0) 345 600 6266

# Electrak® 27 powertrack / underfloor busbar system

3 phase system (grey)



 Selection charts **p. 8-9**  
Dimensions and technical information **p. 18-23**

Approved to ASTA Standard 138 and ISO 9001 : 2008  
Conforms to BS EN 61534-22 : 2014. Fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations  
A compact system that can be installed in floor voids as low as 48 mm

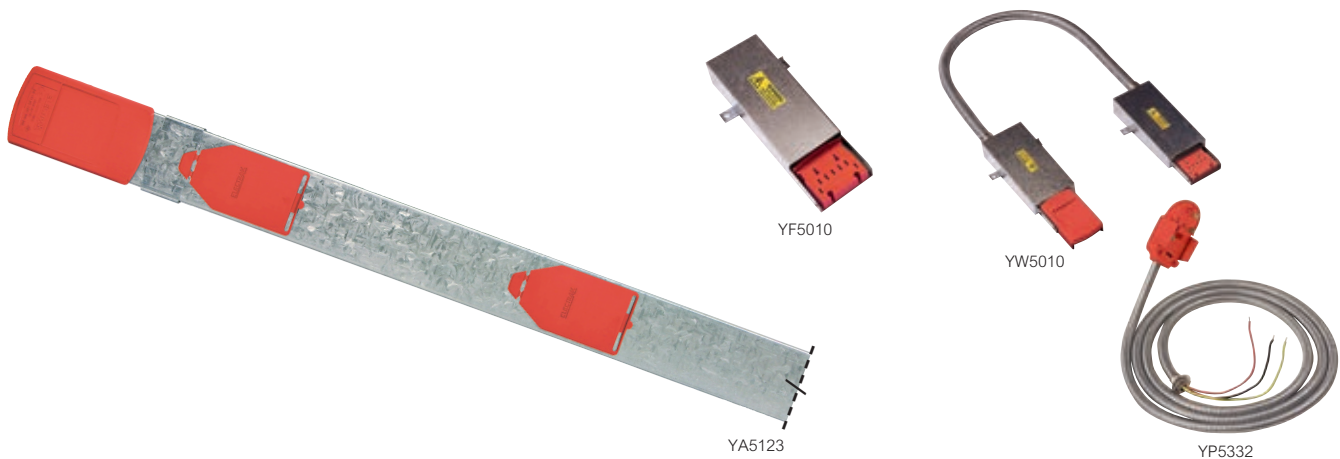
Pack	Cat. Nos.	Track system components
		<b>Electrak 27 3 phase track lengths</b> Track lengths fit together using the integral connectors on each length Track lengths should always be secured using the integral floor fixing brackets 300 mm socket centres
1	NA4123	1·2 m, 4 outlets, 2 floor fixing brackets
1	NA4183	1·8 m, 6 outlets, 2 floor fixing brackets
1	NA4243	2·4 m, 8 outlets, 2 floor fixing brackets
1	NA4363	3·6 m, 12 outlets, 3 floor fixing brackets
		<b>Track feed unit</b> With one 25 mm diameter hole suitable for MICCC, armoured cables or single core cables in conduit
1	NF4010	
		<b>Flexible interlinks</b> Can be used to overcome obstructions or as corners where required
1	NW4000	Excluding cables and conduit
1	NW4010	1·2 m flexible metal conduit
1	NW4020	2·4 m flexible metal conduit
		<b>Special fixing brackets</b> Required when track is raised off surface level Brackets raise track by 21 mm and should be spaced 600 mm apart
1	DZ1210	For fitting under track body and track feed
1	DZ1230	For fitting under integral track connectors

Pack	Cat. Nos.	Tap-off units
		Tap-off length is determined by the cable and not the conduit length, e.g. a 3 m tap-off has 3 m of cable and 2·6 m of flexible metal conduit <sup>1</sup> Tap-off units in excess of 3 m should only be used if they contain a fuse or if the powertrack is protected by a protective device not exceeding 32 A
		<b>32 A 415 V 3 phase</b> 20 mm Ø, L1, L2, L3, N, PE
1	NZ4331	3 m
1	NZ4531	5 m
		<b>32 A L1<sup>2</sup> unfused</b> Reconfigurable live pin 16 mm Ø, L, N, PE
1	NP4332	3 m
1	NP4532	5 m
		<b>32 A L2<sup>2</sup> unfused</b> Reconfigurable live pin 16 mm Ø, L, N, PE
1	NP4302	3 m
1	NP4502	5 m
		<b>32 A L3<sup>2</sup> unfused</b> Reconfigurable live pin 16 mm Ø, L, N, PE
1	NP4303	3 m
1	NP4503	5 m
		<b>Tap-off units specifically for the U.A.E.</b> To meet the local requirements, these tap-offs contain silver-flashed blades, larger 20 mm Ø conduits, minimum 4 mm <sup>2</sup> conductors and use RYB colour coding for the conductors
		<b>32 A unfused</b>
1	NP4332R	3 m L1 U.A.E. (R)
1	NP4532R	5 m L1 U.A.E. (R)
1	NP4302Y	3 m L2 U.A.E. (Y)
1	NP4502Y	5 m L2 U.A.E. (Y)
1	NP4303B	3 m L3 U.A.E. (B)
1	NP4503B	5 m L3 U.A.E. (B)

1 : Tap-offs are supplied as standard with flexible metal conduit  
For alternative wiring solutions, contact us on +44 (0) 345 600 6266  
2 : All NP tap-offs are reconfigurable between L1, L2, or L3 for 3 phase track

# Electrak® 28 powertrack / underfloor busbar system

## auxiliary earth system (red)



Selection charts **p. 8-9**  
Dimensions and technical information **p. 18-23**

Approved to ASTA Standard 138 and ISO 9001 : 2008  
Conforms to BS EN 61534-22 : 2014. Fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations  
A compact system that can be installed in floor voids as low as 48 mm

Pack	Cat. Nos.	Track system components
		<b>Electrak 28 auxiliary earth track lengths</b>
		Track lengths fit together using the integral connectors on each length Track lengths should always be secured using the integral floor fixing brackets 300 mm socket centres
1	YA5123	1.2 m, 4 outlets, 2 floor fixing brackets
1	YA5183	1.8 m, 6 outlets, 2 floor fixing brackets
1	YA5243	2.4 m, 8 outlets, 2 floor fixing brackets
1	YA5363	3.6 m, 12 outlets, 3 floor fixing brackets
		<b>Track feed unit</b>
1	YF5010	With one 25 mm diameter hole suitable for MICC, armoured cables or single core cables in conduit
		<b>Flexible interlinks</b>
		Can be used to overcome obstructions or as corners where required
1	YW5000	Excluding cables and conduit
1	YW5010	1.2 m flexible metal conduit
1	YW5020	2.4 m flexible metal conduit
		<b>Special fixing brackets</b>
		Required when track is raised off surface level Brackets raise track by 21 mm and should be spaced 600 mm apart
1	DZ1210	For fitting under track body and track feed
1	DZ1230	For fitting under integral track connectors

Pack	Cat. Nos.	Tap-off units
		Tap-off length is determined by the cable and not the conduit length, e.g. a 3 m tap-off has 3 m of cable and 2.6 m of flexible metal conduit <sup>1</sup> Tap-off units in excess of 3 m should only be used if they contain a fuse or if the powertrack is protected by a protective device not exceeding 32 A
		<b>32 A unfused</b>
		16 mm Ø, L, N, PE
1	YP5332	3 m
1	YP5532	5 m
		<b>13 A fused</b>
		16 mm Ø, L, N, PE
1	YP5313	3 m
1	YP5513	5 m
		<b>13 A 543-7 fused - high integrity</b>
		16 mm Ø, L, N, PE
1	YP5327	3 m
1	YP5527	5 m

<sup>1</sup> : Tap-offs are supplied as standard with flexible metal conduit  
For alternative wiring solutions, contact us on +44 (0) 345 600 6266



# Electrak tinned powertrack...

Designed to meet  
local standards

Guideline For Design, Testing and Installation Of Busways GL.GN.01.

Issued by: Abu Dhabi Distribution Co.

Low Voltage Switchgear Committee

Issue: 2, Revision: 1, effective 01/02/2012

16. Lighting & Small Power Busways & Modular Wiring  
Lighting & Power Socket bus duct and modular wiring are considered part of building wiring and regulated by the Electricity Wiring Regulation issued by RSB. It shall comply with respective specifications under the Wiring regulation. ADDC LVSGC approves these methods in principle provided that the RSB set aspects are incorporated (like tinning of copper, colour coding etc.).

**Guideline For Design, Testing and Installation Of Busways GL.GN.01**

Copyright Abu Dhabi Distribution Co.

Developed to meet the ADDC requirements for busways, these specially designed ranges see all busbars tinned along their entire length, and all busbar connectors and tap-off blades plated.

Approved to ASTA standard 138 and designed to be in accordance with the requirements of BS EN 60439-2: 2000 and BS EN 61534-22: 2009 (IEC 61534: 2009).

**The Electrical Wiring Regulations 2007**  
Issued by: The Regulation and Supervision Bureau for the Water, Wastewater and Electricity Sector in the Emirate of Abu Dhabi. Revision 1, January 2009

7.7 Busways, bus ducts and busbar risers  
7.7.6 Busways, bus ducts and busbar risers shall have neutral conductors of equal size to the phase conductors and shall have a dedicated Earth Conductor. The use of the metal casing as an earth conductor permitted only for Earth Leakage Protected Installations, and with the prior approval of the Distribution Company.

**The Electrical Wiring Regulations 2007**

Copyright The Regulation and Supervision Bureau (RSB)

The Electrak powertrack system uses equal size tinned copper busbars for live, neutral and earth conductors to meet with the requirements of The Regulation and Supervision Bureau of the Water, Wastewater and Electricity Sector in the Emirate of Abu Dhabi.

As a specific requirement for use within Abu Dhabi, Legrand has developed a 'tinned' busbar which has been designed in line with the guidance for busways outlined by the Abu Dhabi Distribution Company (ADDC), as detailed below.



Electrak 28R tinned tap-offs



Electrak 28R tinned busbar connectors

**Appendix 8.** Colour identification for cables

Conductor	Colour
<b>Non-flexible fixed wiring and all 3 phase cables:</b>	
Phase 1	Red
Phase 2	Yellow
Phase 3	Blue
Neutral	Black
Earth conductors	Green / yellow

To meet the local regulations, tap-offs designed for sale within this region are supplied with the following cable colours:

Within any single phase system (e.g. Electrak 25R or Electrak 28R) - red (L), black (N) and green/yellow (E).

Specifically within the 3 phase Electrak 27 system - L1 tap-offs are red (L), black (N) and green/yellow (E); L2 tap-offs are yellow (L), black (N) and green/yellow (E); L3 tap-offs are blue (L), black (N) and green/yellow (E).

**Appendix 9.** Capacity of conduits and trunking

Conduit (mm <sup>2</sup> )	Diameter of Conduit (mm <sup>2</sup> )		
	20	25	32
<b>Maximum number of conductors</b>			
1.5	7	12	-
2.5	5	9	12
4.0	3	6	9

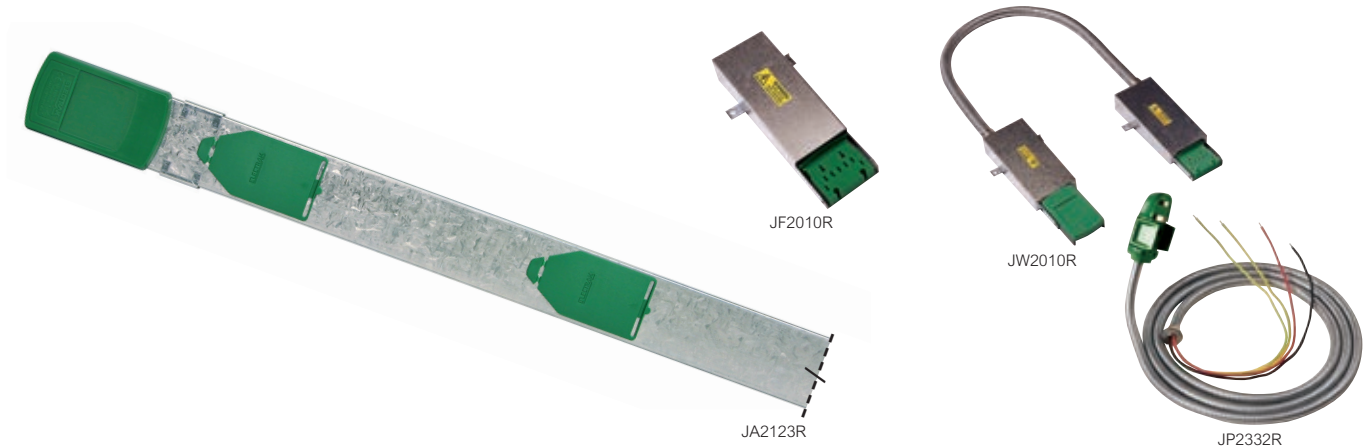
The tap-offs contain a maximum of 2 x 4mm<sup>2</sup> conductors (excluding earths) housed in a 20mm ø metal flexible conduit.

**NOTE:** When designing installation in regions with higher ambient temperatures than 35°C, de-rating factors may need to be applied. Please refer to the table on page 22 for details.



# Electrak® 25R tinned powertrack / underfloor busbar system

low noise / clean earth system (green)



Selection charts **p. 8-9**  
Dimensions and technical information **p. 18-23**

Approved to ASTA Standard 138 and ISO 9001 : 2008  
Conforms to BS EN 61534-22 : 2014. Fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations  
A compact system that can be installed in floor voids as low as 48 mm

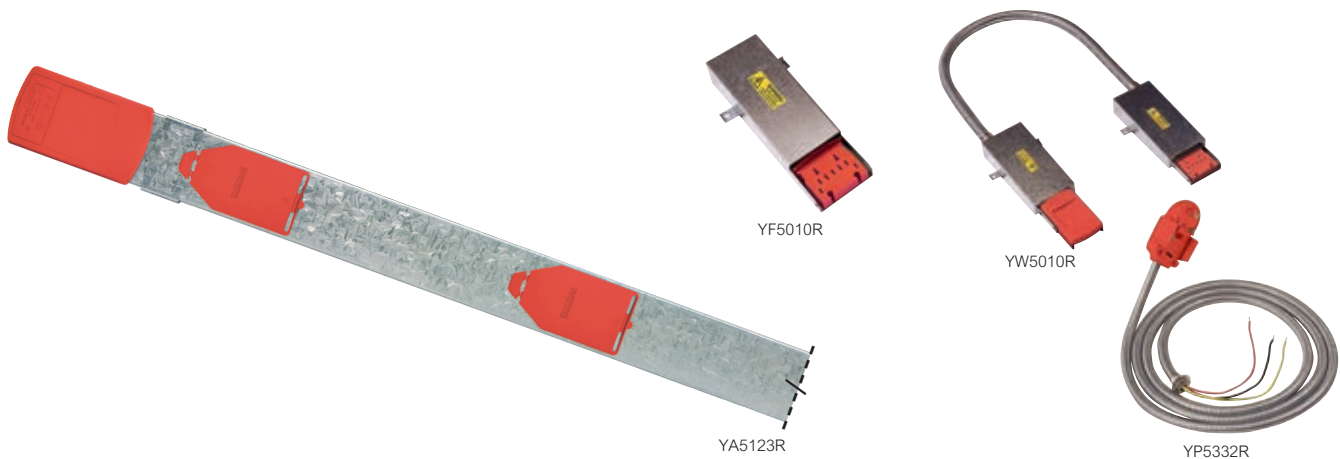
Pack	Cat. Nos.	Busbar system components
		<b>63 A low noise / clean earth busbar lengths</b> Busbar lengths fit together using the integral connectors on each length Lengths should always be secured using the integral floor fixing brackets 300 mm socket centres
1	JA2123R	1·2 m, 4 outlets, 2 floor fixing brackets
1	JA2183R	1·8 m, 6 outlets, 2 floor fixing brackets
1	JA2243R	2·4 m, 8 outlets, 2 floor fixing brackets
1	JA2363R	3·6 m, 12 outlets, 3 floor fixing brackets
		<b>Feed unit</b>
1	JF2010R	With one 25 mm diameter hole suitable for MICC, armoured cables or single core cables in conduit
		<b>Flexible interlinks</b> Can be used to overcome obstructions or as corners where required
1	JW2000R	Excluding cables and conduit
1	JW2010R	1·2 m flexible metal conduit
1	JW2020R	2·4 m flexible metal conduit
		<b>Special fixing brackets</b> Required when busbar is raised off surface level Brackets raise the system by 21 mm and should be spaced 600 mm apart
1	DZ1210	For fitting under lengths and feed units
1	DZ1230	For fitting under integral connectors

Pack	Cat. Nos.	Tap-off units
		Tap-off length is determined by the cable and not the conduit length, e.g. a 3 m tap-off has 3 m of cable and 2·6 m of flexible metal conduit <sup>1</sup> Tap-off units in excess of 3 m should only be used if they contain a fuse or if the busbar run is protected by a protective device not exceeding 32 A
		<b>32 A unfused</b> 20 mm Ø, CE, L, N, PE (4 mm <sup>2</sup> )
1	JP2332R	3 m
1	JP2532R	5 m
		<b>13 A fused - high integrity</b> 20 mm Ø, CE, L, N, PE (4 mm <sup>2</sup> )
1	JP2314R	3 m
1	JP2514R	5 m

<sup>1</sup> : Tap-offs are supplied as standard with flexible metal conduit  
For alternative wiring solutions, contact us on +44 (0) 345 600 6266

# Electrak® 28R tinned powertrack / underfloor busbar system

## auxiliary earth system (red)



 Selection charts **p. 8-9**  
Dimensions and technical information **p. 18-23**

Approved to ASTA Standard 138 and ISO 9001 : 2008  
Conforms to BS EN 61534-22 : 2014. Fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations  
A compact system that can be installed in floor voids as low as 48 mm

Pack	Cat. Nos.	Busbar system components
		<b>63 A auxiliary earth busbar lengths</b> Busbar lengths fit together using the integral connectors on each length Lengths should always be secured using the integral floor fixing brackets 300 mm socket centres
1	YA5123R	1·2 m, 4 outlets, 2 floor fixing brackets
1	YA5183R	1·8 m, 6 outlets, 2 floor fixing brackets
1	YA5243R	2·4 m, 8 outlets, 2 floor fixing brackets
1	YA5363R	3·6 m, 12 outlets, 3 floor fixing brackets
		<b>Feed unit</b> With one 25 mm diameter hole suitable for MICC, armoured cables or single core cables in conduit
1	YF5010R	
		<b>Flexible interlinks</b> Can be used to overcome obstructions or as corners where required
1	YW5000R	Excluding cables and conduit
1	YW5010R	1·2 m flexible metal conduit
1	YW5020R	2·4 m flexible metal conduit
		<b>Special fixing brackets</b> Required when busbar is raised off surface level Brackets raise the system by 21 mm and should be spaced 600 mm apart
1	DZ1210	For fitting under lengths and feed units
1	DZ1230	For fitting under integral connectors

Pack	Cat. Nos.	Tap-off units
		Tap-off length is determined by the cable and not the conduit length, e.g. a 3 m tap-off has 3 m of cable and 2·6 m of flexible metal conduit <sup>1</sup> Tap-off units in excess of 3 m should only be used if they contain a fuse or if the busbar run is protected by a protective device not exceeding 32 A
		<b>32 A unfused</b> 20 mm Ø, L, N, PE (4 mm <sup>2</sup> )
1	YP5332R	3 m
1	YP5532R	5 m
		<b>13 A fused - high integrity</b> 20 mm Ø, L, N, PE (4 mm <sup>2</sup> )
1	YP5314R	3 m
1	YP5514R	5 m

<sup>1</sup> : Tap-offs are supplied as standard with flexible metal conduit  
For alternative wiring solutions, contact us on +44 (0) 345 600 6266

# Electrak® powertrack / underfloor busbar system

## design and installation

### General installation notes

Electrak powertrack is a compact system that can be installed in floor voids as low as 48 mm

Feed units are provided with one or two 25 mm diameter holes suitable for MICCC, armoured cables or single core cables in conduit  
Track lengths connect together and to feed units using the integral connectors on each length

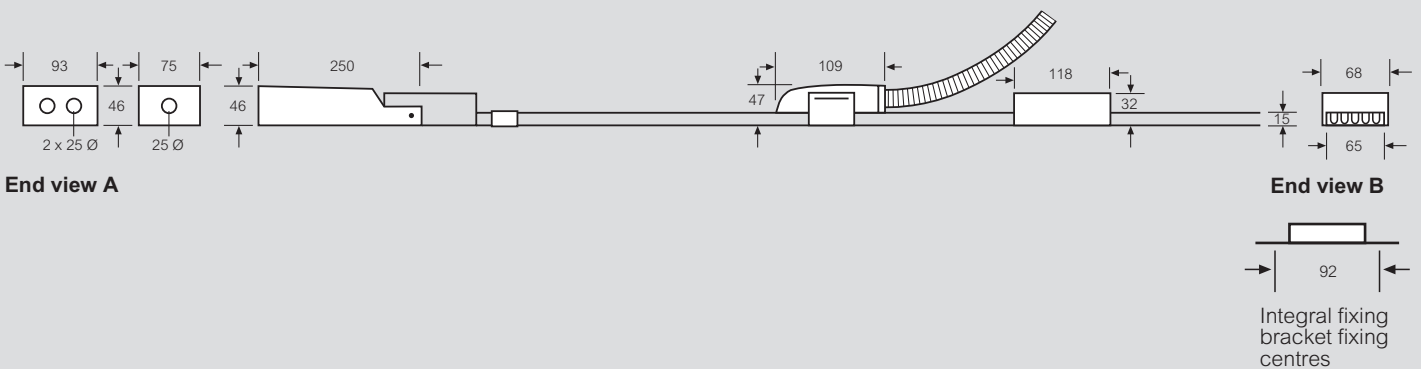
Lengths should always be secured using the integral floor fixing brackets; three on the 3.6 m length and two on 2.4 m, 1.8 m or 1.2 m lengths

Access to power is provided along the busbar length by simply plugging tap-off units into shuttered socket outlets. These tap-off units feed all types of conventional floor service outlet boxes or feed workstations directly through the floor via insulated conductors contained in flexible metal or VO rated nylon conduit. When connecting tap-offs directly through the floor via grommet outlets to workstations care must be taken to ensure that the tap-off length is adequate

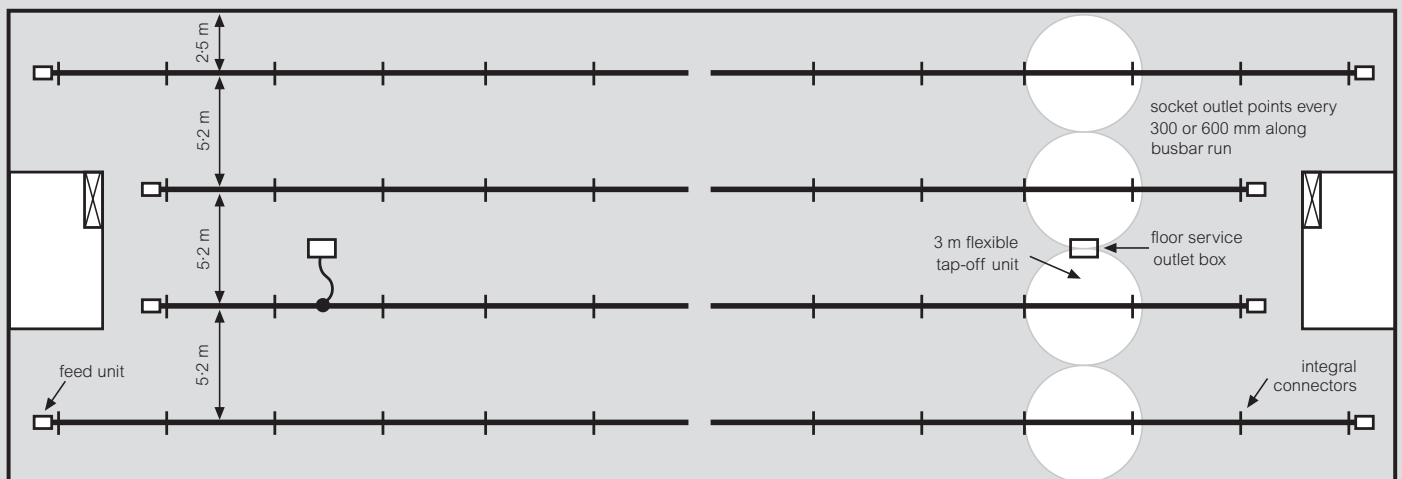
The dual system has both standard and low noise / clean earth systems incorporated. As well as dual tap-offs, both standard and low noise / clean earth tap-offs can be plugged into any socket outlet along the busbar length. The dual tap-off incorporates both standard and low noise cables

Optimum layout flexibility is achieved by positioning busbar lengths a maximum of 5.2 m apart and 2.5 m from the wall, and by connecting the 3 m tap-off units to floor outlet boxes. This means every part of the floor area can be served. Flexible interlinks can be used to overcome obstructions or used as corners if required

### Dimensions



### Example floor layout



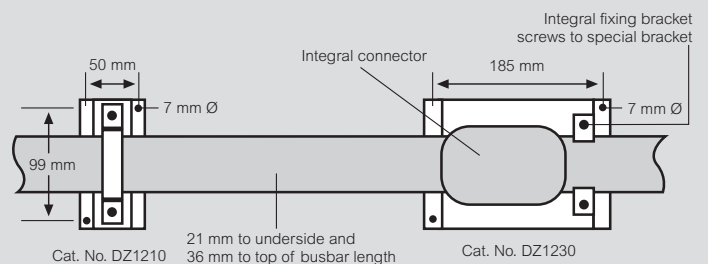
All dimensions (mm) are nominal

### Special fixing brackets

Electrak special fixing brackets are available to raise the system by 21 mm. Ensure brackets are spaced 600 mm apart and always have support under the integral connectors and feed units. Failure to do so may undermine the integrity of the system

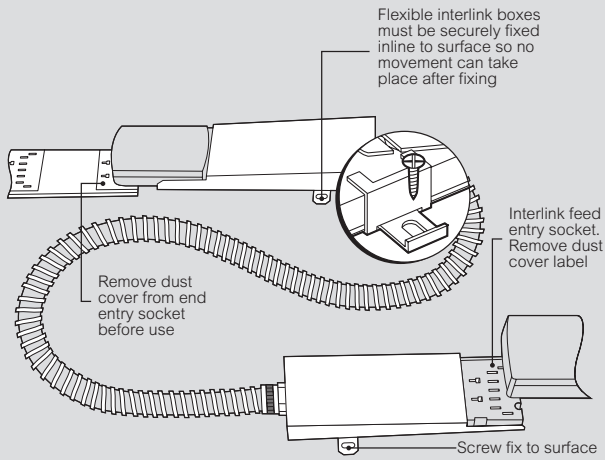
Cat. No. DZ1210 raised off-floor fixing brackets are spaced at 600 mm centres along the busbar run. Also use bottom half of bracket under feed unit and flexible interlink

Cat. No. DZ1230 raised off-floor fixing brackets are always used under integral connectors. Busbar is secured to raised brackets using the integral fixing bracket



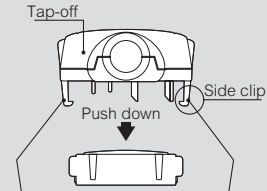
## Product configuration

### Flexible interlink



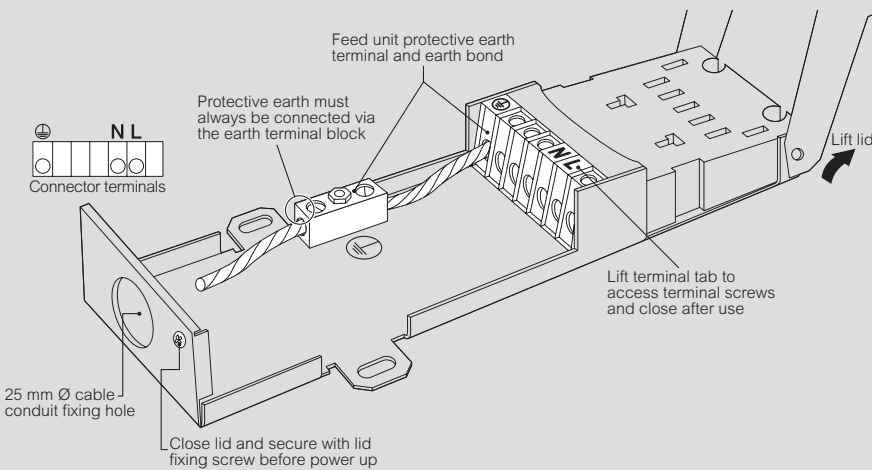
### Tap-off connection

Depress tap-off side clips and push down

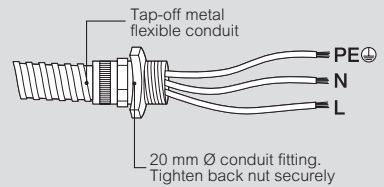


Make sure both tap-off side clips are fully pushed home on both sides of the bar

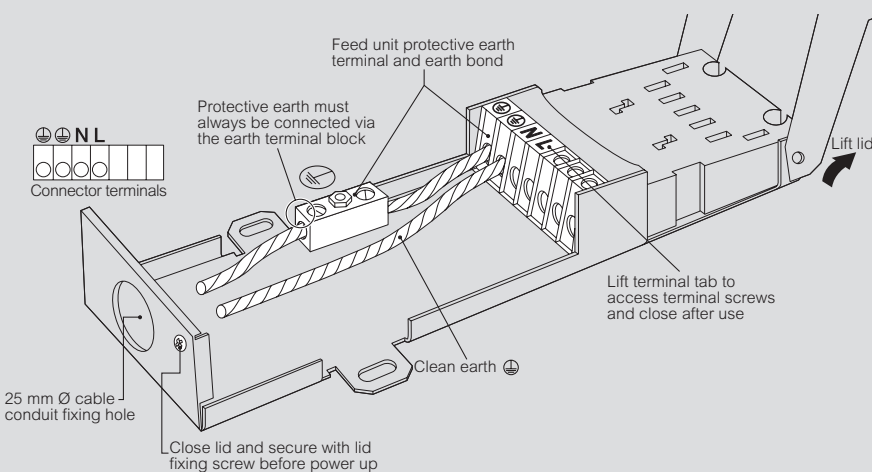
### Feed unit (Cat. No. DF1010) Sub-cabling



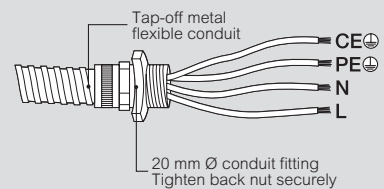
### Tap-off connection



### Feed unit (Cat. No. JF2010 and JF2010R) Sub-cabling

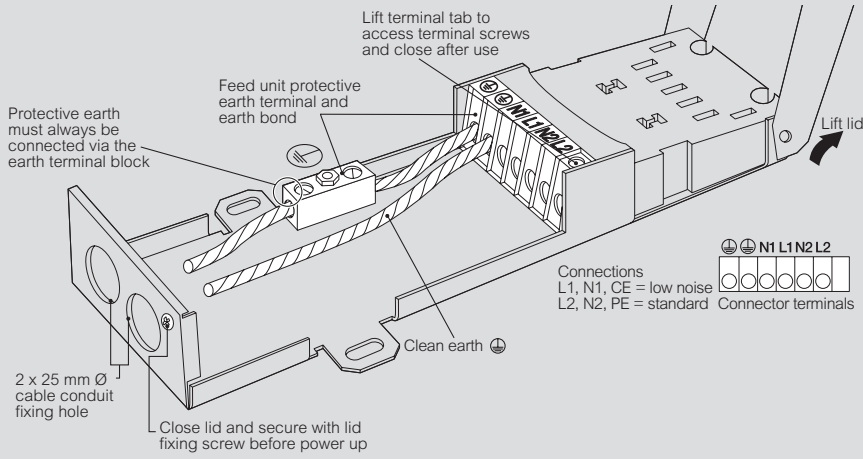


### Tap-off connection

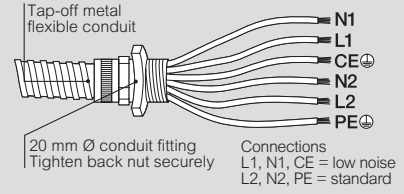


**Product configuration (continued)**

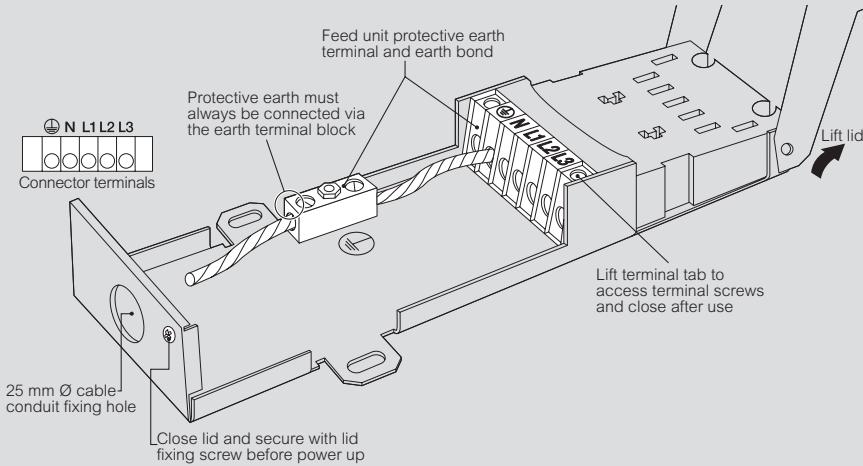
**Feed unit (Cat. No. KF3010) Sub-cabling**



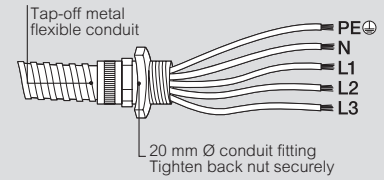
**Dual tap-off connection (dark green)**



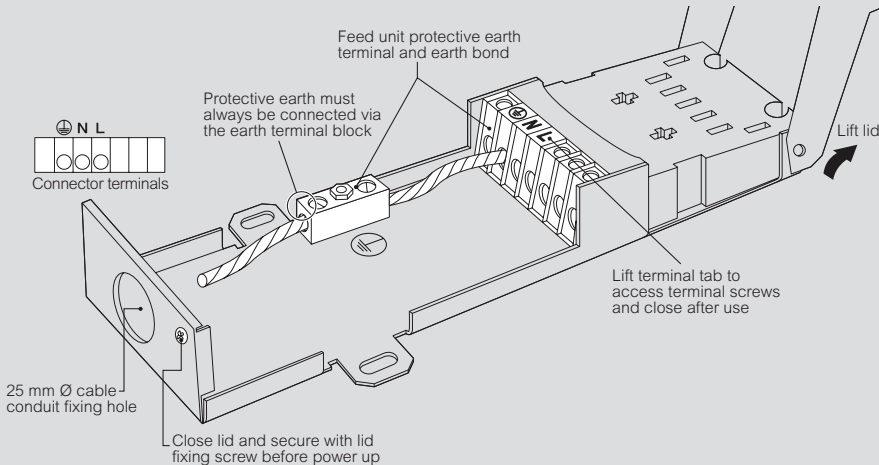
**Feed unit (Cat. No. NF4010) Sub-cabling**



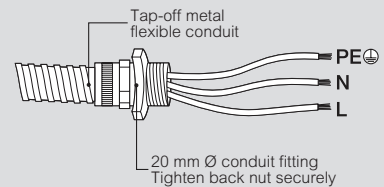
**3 phase tap-off connection**



**Feed unit (Cat. No. YF5010 and YF5010R) Sub-cabling**



**Tap-off connection**

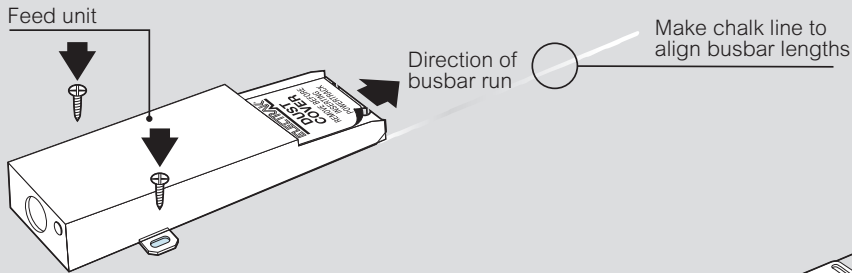


All dimensions (mm) are nominal

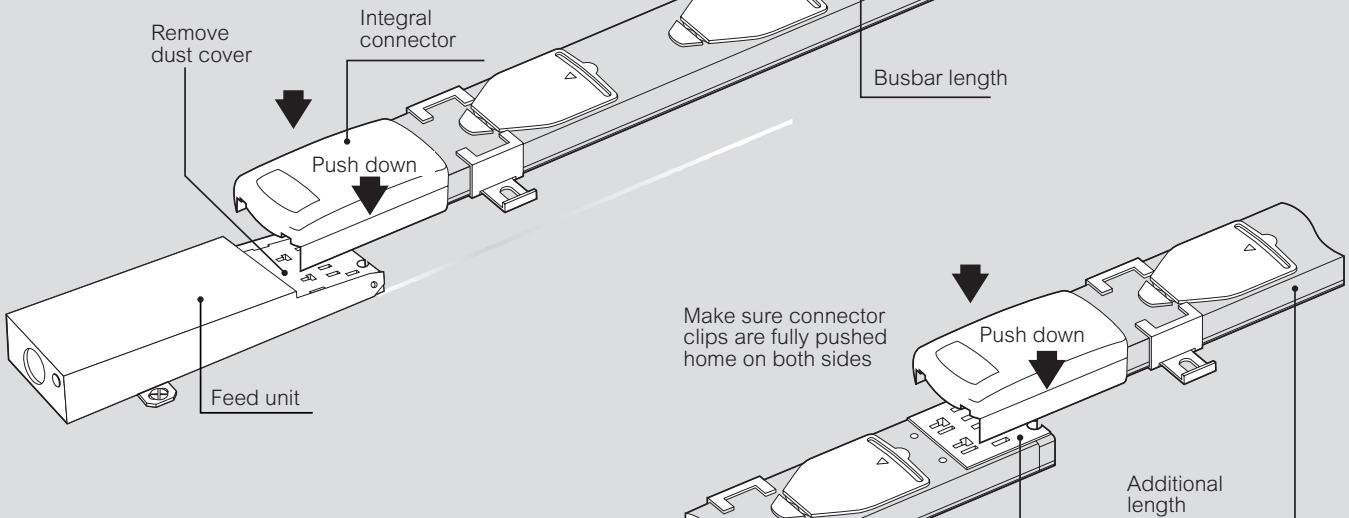
# Electrak® powertrack / underfloor busbar system

installation (continued)

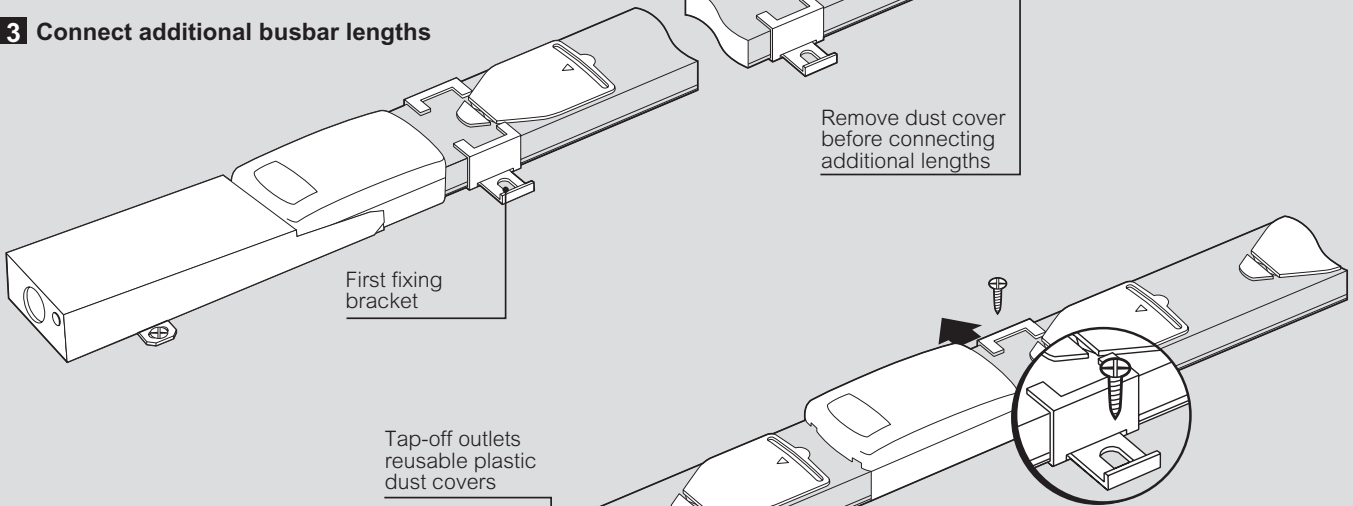
## 1 Fix feed unit to surface



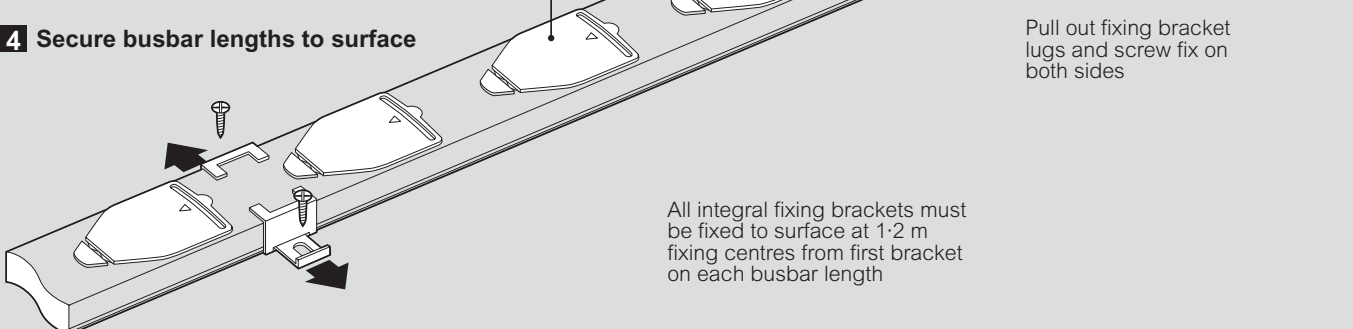
## 2 Connect busbar length to feed unit



## 3 Connect additional busbar lengths



## 4 Secure busbar lengths to surface



All dimensions (mm) are nominal

### Standards



Approved to ASTA Standard 138  
 BS EN 61534-22 : 2014  
 and IEC 61534-22 : 2014  
 Manufactured within an approved ISO 9001 : 2008 and ISO 14001 : 2004 facility  
 Assessed Quality Assurance Certificate No. 2029  
 Electrak powertrack / underfloor busbar fully complies with the requirements of BS 7671 : 2008 + AMD 3 : 2015 (IET Wiring Regulations)

### Ambient temperature rating factors

The current carrying capacity for a powertrack / underfloor busbar ( $I_n$ ) is affected by the ambient temperature  
 For Electrak powertrack / underfloor busbar the ambient rating factor  $K_\alpha$  is equal to 1 for ambient temperatures up to and including 35° C

$$I_z = K_\alpha I_n$$

Where :

$I_z$  = effective current carrying capacity for continuous service under particular installation conditions

$K_\alpha$  = ambient temperature factor

$I_n$  = nominal current carrying capacity

For ambient temperatures exceeding 35° C the values of  $K_\alpha$  and  $I_z$  are given in the following tables

Powertrack / underfloor busbar system							
Ambient	20°C	25°C	30°C	35°C	40°C	45°C	50°C
$K_\alpha$	1				0.95	0.85	0.80
$I_z$	63 A				59 A	53 A	50 A

32 A unfused tap-off (using thermosetting 90°C cables)							
Ambient	20°C	25°C	30°C	35°C	40°C	45°C	50°C
$K_\alpha$	1				0.95	0.85	0.80
$I_z$	32 A				30 A	27 A	25 A

13 A fused tap-off (using 2.5 mm <sup>2</sup> thermosetting 90°C cables)							
Ambient	20°C	25°C	30°C	35°C	40°C	45°C	50°C
$K_\alpha$	1						
$I_z$	13 A						

### References :

BS 7671 : 2008 incorporating amendment No. 3 : 2015  
 Appendix 8 – Current carrying capacity for powertrack systems  
 Appendix 4 – Table 4B1 Rating factors for thermosetting cables  
 Appendix 4 – Table 4E1A – Single core 90°C thermosetting insulated cables (non-armoured)

### Earth fault loop impedance

BS 7671 : 2008 + AMD 3 : 2015 IET Wiring Regulations require accurate determination of the total earth loop impedance, which must be sufficiently low to allow the protective device to operate within the specified time, which for socket outlets is 0.4 seconds. The values relevant to Electrak for calculating the earth fault loop impedance are shown in the electrical test data table, see opposite

### Durability

Electrak systems are superbly designed and extremely robust. They can be expected to stand up to all normal site conditions. Electrak powertrack / underfloor busbar has been short circuit strength tested by ASTA

### Installations with high protective conductor currents

All unfused tap-offs comply with Regulation 543.7 without the need for additional earth conductors. Regulation 543.7.1.103 (ii) states “a single copper protective conductor having a cross-sectional area of not less than 4 mm<sup>2</sup>, complying with the requirements of Regulations 543.2 and 543.3, the protective conductor being enclosed to provide additional protection against mechanical damage, for example, within a flexible conduit”

For installations with high protective conductor currents requiring fused tap-offs, a 543.7 compliant tap-off must be used. Normally fused tap-offs incorporate 1.5 mm<sup>2</sup> conductors, however in our fused 543.7 tap-offs, the 1.5 mm<sup>2</sup> earth conductor is replaced with a 4 mm<sup>2</sup> conductor and are therefore compliant with Section 543.7.1.103 (ii)

### 32 A tap-off unit

The 3 m 32 A tap-off unit comprises an unfused tap-off with 2.6 m of flexible metal conduit with integral 4 mm<sup>2</sup> LSOH conductors

These units are designed to comply with regulation 434.2.1 of the IET Wiring Regulations by virtue of the following :

- maximum length of cable is 3 m
- it is factory assembled and fully tested item with cable installed in high quality flexible conduit

Fault condition protection for the tap-off assembly and the floor box socket outlets is delivered by the circuit protection device  
 Disconnection time for socket outlets is 0.4 seconds (Regulation 411.3.2.2). The Electrak system meets this requirement

Tap-off units in excess of 3 m should only be used if they contain a fuse or the busbar run is protected by a protective device not exceeding 32 A



#### Volt drops (live and neutral)

Busbars	3.0 mV/A/m
Cable connector	0.4 mV/A
Integral connector	0.4 mV/A
32 A tap-off	0.4 mV/A
+ 4 mm <sup>2</sup> cable	11 mV/A/m
Flexible corner assembly	1.5 mV/A
+ 10 mm <sup>2</sup> cable	4.0 mV/A/m

#### Earth fault loop impedance

Phase busbar	1.5 mΩ/m
Earth busbar	1.5 mΩ/m
Earth housing	1.1 mΩ/m
Earth busbar and housing	0.8 mΩ/m
Cable connector	0.4 mΩ
Integral connector	0.6 mΩ
32 A tap-off	0.6 mΩ
+ 4 mm <sup>2</sup> cable	11 mΩ/m
Flexible corner assembly	1.5 mΩ
+ 10 mm <sup>2</sup> cable	4.0 mΩ/m
Rated conditional short-circuit current	16 KA
Ambient temperature	25°C

#### Mechanical data

	E24 – E28	E28R
Number of conductors	3-6	3
Busbar conductor cross sectional area	13 mm <sup>2</sup>	13 mm <sup>2</sup>
Housing cross sectional area (copper equivalent)	13 mm <sup>2</sup>	13 mm <sup>2</sup>
Cable terminal capacity	16 mm <sup>2</sup>	16 mm <sup>2</sup>
Tap-off cable 32 A	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Tap-off cable 13 A fused	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Tap-off conduit, up to 4 conductors	16 mmØ	20 mmØ
Tap-off conduit, 5 and 6 conductors	20 mm <sup>2</sup>	N/A
Flexible corner cable (tri-rated, high temperature)	10 mm <sup>2</sup>	10 mm <sup>2</sup>
Flexible corner conduit	25 mmØ	25 mmØ
IP rating	40	40

#### Electrical test data

Rated current	63 A
Rated voltage	230/400 V~
Frequency	50/60 Hz
Conductor resistance - live and neutral	3.0 mΩ/m
Conductor impedance	1.5 mΩ/m

#### Material specifications

Housing - busbar lengths	Galvanised steel, natural finish
Busbars	High conductivity copper (Tinned version is electro-tin plated)
Busbar insulator	PTFE
Integral connectors / Tap-off outlets	Flame retardant polycarbonate
Tap-off outlet entry shutter	Acetal
Tap-off housing	Flame retardant polycarbonate
Integral connector blades	Copper (Tinned version is plated)
Tap-off blades	Copper (Tinned version is plated)
Tap-off/flexible corner conduit, metal	Electro-galvanised steel
Tap-off cable	LSOH to BS 7211
Flexible interlink cable	Tri-rated to BS 6231
Feed box/flexible interlink boxes	Galvanised steel
Feed connector terminals/earth block	Brass (Tinned version is plated)
Fixing brackets	Galvanised steel
13 A tap-off, fuse	To BS 1362, ASTA approved

# FLOOR BOXES

choice, flexibility &

easy installation



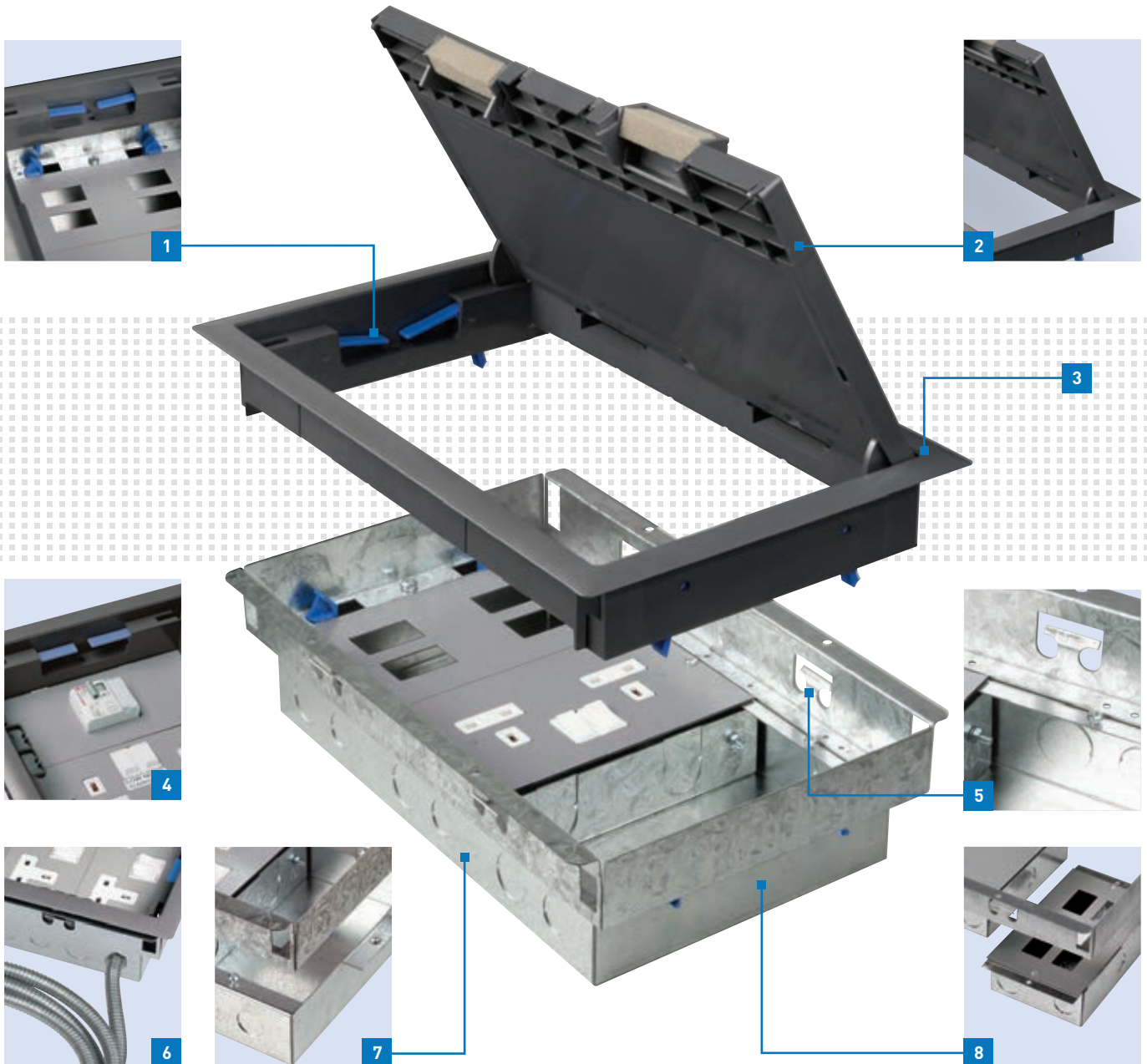
Raised access floor boxes and slab boxes offer complete versatility.

Floor boxes are available pre-wired with powertrack tap-off, or supplied empty (unassembled), with a choice of single or separate compartment bases and three depth options. With a vast selection of power and data plates available, boxes can be tailored to the specific requirements of each office installation.



Available in 2, 3 and 4 compartments and with a choice of three depths, Electrak floor boxes have been developed with a host of special features:

- Available pre-wired with tap-off or supplied unassembled
- A vast selection of power and data plates, including RCD options
- Single or separate compartment bases for ease of data cabling
- Rapid installation and fast ratchet mechanism which adjusts to floor finish thickness



- 1** Rapid fit /remove mechanism adjusts for flooring thickness
- 2** Quick-fit, reversible lid for rapid installation
- 3** Durable ABS trim and lid surround
- 4** Various RCD protection options available

- 5** Rapid fit push lock secures base in floor aperture
- 6** Available pre-wired with tap-off
- 7** Three depth options: 75mm, 85mm, 110mm
- 8** Single or separate compartment bases

## access floor service outlet and slab mounted floor boxes

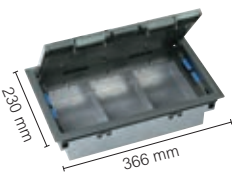







### empty boxes and accessory plates

		2 compartment		3 compartment		4 compartment	
To configure boxes as required, select : 1. Box depth 2. Number of compartments required 3. Desired accessory plates							
Empty boxes	Example	100 mm width plates		100 mm width plates		75 mm width plates	
Single base – 75 mm depth		CR2001		CR011		CR4001	
Single base – 85 mm depth (standard box)		CR2002		CR012		CR4002	
Single base – 110 mm depth		CR2003		CR013		CR4003	
Separate compartment base – 75 mm depth		CR2004		CR014		CR4004	
Separate compartment base – 85 mm depth		CR2005		CR015		CR4005	
Separate compartment base – 110 mm depth		CR2006		CR016		CR4006	
Slab boxes		1 compartment	2 compartment	3 compartment	4 compartment		
Fix directly onto floor slab (supplied empty)		CR5102	CR5202	CR5302	CR5402		
Accessory plates		For 1, 2 and 3 compartment boxes				For 4 compartment boxes	
Blank plate		CR020				CR4100	
2 gang switched socket outlet		CR022				CR4101	
2 gang switched socket outlet, low noise / clean earth		CR023				CR4102	
2 gang non-standard switched socket outlet		CR027				CR4103	
2 gang unswitched socket outlet		CR029				CR4104	
3 gang unswitched socket outlet		CR030				CR4105	
3 gang unswitched socket outlet, low noise / clean earth		CR044				CR4118	
2 gang RCD socket outlet		CR036				CR4111	
2 gang RCD socket outlet, low noise / clean earth		CR043				CR4117	
Punched plate for 2 x 1 gang accessories (60·3 mm fixing centres)		CR026				-	
Punched plate for 2 gang accessories (120·6 mm fixing centres)		CR028				-	
Angled punched plate for 4 x RJ45 sockets (37 mm x 22 mm cut-outs)		CR042				CR4115	
2 x LJ2 accessory plate (50 mm fixing centres)		CR031				CR4106	
4 x BNC connector plate		CR033				CR4108	
4 x Data / telecoms plate (37 mm x 22 mm cut-outs)		CR024				CR4112	
6 x Data / telecoms plate (37 mm x 22 mm cut-outs)		CR025				CR4113	









## access floor pre-wired service outlet boxes and accessory plates

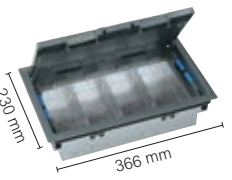








### Pre-wired service outlet boxes with Electrak tap-offs

1. Select powertrack tap-off and desired configuration
2. Select additional accessory plates (if required)







3 compartment			Includes 1 x twin switched socket outlet	Includes 2 x twin switched socket outlet	Includes 1 x 2 gang RCD socket outlet	Includes 2 x 2 gang RCD socket outlet
 <p>230 mm 366 mm</p>	<b>Electrak 24 - standard tap-off</b>					
		DP1332 - 3 m	CR100	CR102	CR100R	CR102R
		DP1532 - 5 m	CR101	CR103	CR101R	CR103R
	<b>Electrak 25 - low noise / clean earth tap-off</b>					
		JP2332 - 3 m	CR110	CR112	CR110R	CR112R
		JP2532 - 5 m	CR111	CR113	CR111R	CR113R
	<b>Electrak 28 - auxiliary earth tap-off</b>					
		YP5332 - 3 m	CR104	CR106	CR104R	CR106R
YP5532 - 5 m		CR105	CR107	CR105R	CR107R	

### Additional plates for 3 compartment boxes

Blank plate		CR020	2 x LJ2 accessory plate (50 mm fixing centres)		CR031
Punched plate for 2 x 1 gang accessories (60·3 mm fixing centres)		CR026	4 x BNC connector plate		CR033
Punched plate for 2 gang accessories (120·6 mm fixing centres)		CR028	4 x Data / telecoms plate (37 mm x 22 mm cut-outs)		CR024
Angled punched plate for 4 x RJ45 sockets (37 mm x 22 mm cut-outs)		CR042	6 x Data / telecoms plate (37 mm x 22 mm cut-outs)		CR025

4 compartment			Includes 1 x twin switched socket outlet	Includes 2 x twin switched socket outlet	Includes 1 x 2 gang RCD socket outlet	Includes 2 x 2 gang RCD socket outlet	Modular RCD protecting 2 x twin switched socket outlets and 1 spare compartment
 <p>230 mm 366 mm</p>	<b>Electrak 24 - standard tap-off</b>						
		DP1332 - 3 m	CR120	CR122	CR120R	CR122R	CR4402
		DP1532 - 5 m	CR121	CR123	CR121R	CR123R	CR4403
	<b>Electrak 25 - low noise / clean earth tap-off</b>						
		JP2332 - 3 m	CR130	CR132	CR130R	CR132R	CR4412
		JP2532 - 5 m	CR131	CR133	CR131R	CR133R	CR4413
	<b>Electrak 28 - auxiliary earth tap-off</b>						
		YP5332 - 3 m	CR124	CR126	CR124R	CR126R	CR4406
YP5532 - 5 m		CR125	CR127	CR125R	CR127R	CR4407	

### Additional plates for 4 compartment boxes

Blank plate		CR4100	4 x BNC connector plate		CR4108
Angled punched plate for 4 x RJ45 sockets (37 mm x 22 mm cut-outs)		CR4115	4 x Data / telecoms plate (37 mm x 22 mm cut-outs)		CR4112
2 x LJ2 accessory plate (50 mm fixing centres)		CR4106	6 x Data / telecoms plate (37 mm x 22 mm cut-outs)		CR4113

## access floor service outlet boxes

### empty boxes



CR4002

CR012

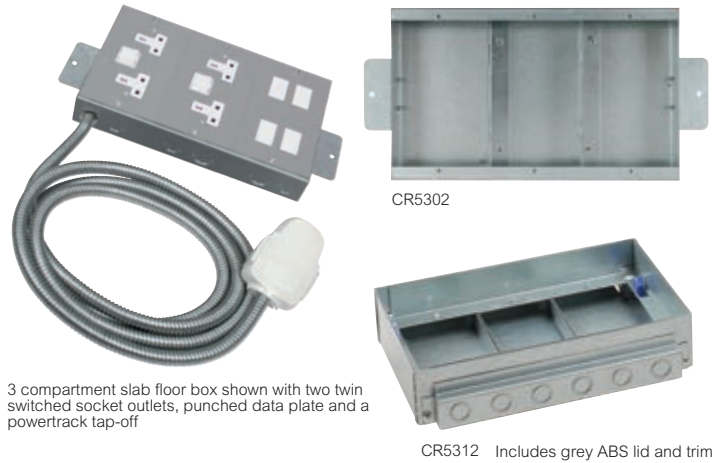
Selection charts **p. 26**  
Dimensions and technical information **p. 31**

Lid and trim mouldings are precision engineered from hard wearing durable ABS. Lid is reinforced with a galvanised mild steel plate  
Mounting frame and box base - 0.9 mm thick galvanised steel  
Each compartment has 2 entries for 20 mm and 2 entries for 25 mm flexible conduits  
Grey mouldings. Alternative colours available to special order  
Grey plates  
2, 3 and 4 compartment boxes are also available with separate individual compartment base units for convenient offsite pre-wiring  
Supplied in parts or fully assembled and configured to customer specification  
Conform to IEC-61534-22

Pack	Cat. Nos.	<b>2 compartment floor boxes</b>
		<b>Empty boxes</b>
		<b>100 mm compartment widths</b>
1	CR2001	Single base - 75 mm depth
1	CR2002	Single base - 85 mm depth (standard box)
1	CR2003	Single base - 110 mm depth
1	CR2004	Separate compartment base - 75 mm depth
1	CR2005	Separate compartment base - 85 mm depth
1	CR2006	Separate compartment base - 110 mm depth
		<b>3 compartment floor boxes</b>
		<b>Empty boxes</b>
		<b>100 mm compartment widths</b>
1	CR011	Single base - 75 mm depth
1	CR012	Single base - 85 mm depth (standard box)
1	CR013	Single base - 110 mm depth
1	CR014	Separate compartment base - 75 mm depth
1	CR015	Separate compartment base - 85 mm depth
1	CR016	Separate compartment base - 110 mm depth
		<b>4 compartment floor boxes</b>
		<b>Empty boxes</b>
		<b>75 mm compartment widths</b>
1	CR4001	Single base - 75 mm depth
1	CR4002	Single base - 85 mm depth (standard box)
1	CR4003	Single base - 110 mm depth
1	CR4004	Separate compartment base - 75 mm depth
1	CR4005	Separate compartment base - 85 mm depth
1	CR4006	Separate compartment base - 110 mm depth

## slab and screed mounted floor boxes

### empty boxes



CR5302

CR5312 Includes grey ABS lid and trim

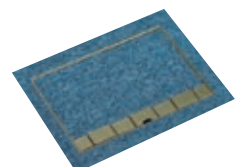
3 compartment slab floor box shown with two twin switched socket outlets, punched data plate and a powertrack tap-off

Selection charts **p. 26**  
Dimensions and technical information **p. 31**

Electrak slab floor boxes are an ideal solution for underfloor power and data requirements  
Used in conjunction with Electrak floor grommets, slab boxes prevent unwanted access to power and data connections

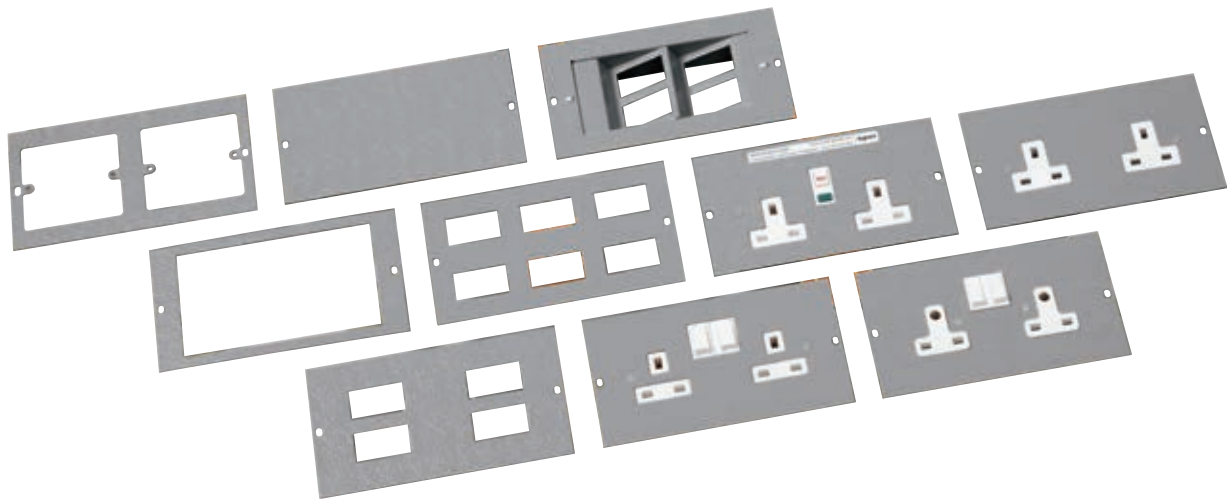
Pack	Cat. Nos.	<b>Slab floor boxes</b>
		Fixes directly onto floor slab Fast and efficient installation with integrated fixing plates Wide range of power and data accessory plates Manufactured from 0.9 mm thick galvanised steel Each compartment has 2 entries for 20 mm and 2 entries for 25 mm flexible conduits
		<b>100 mm compartment widths</b>
		Use plates from the 1, 2 and 3 compartment floor box section <b>p. 26</b>
1	CR5102	1 compartment slab floor box
1	CR5202	2 compartment slab floor box
1	CR5302	3 compartment slab floor box
		<b>75 mm compartment widths</b>
		Use plates from the 4 compartment floor box section <b>p. 26</b>
1	CR5402	4 compartment slab floor box
		<b>Screed floor boxes</b>
		25 mm conduit fed, to suit screed 75 mm to 90 mm deep
1	CR5312	3 compartment screed floor box
1	CR5412	4 compartment screed floor box

Edge trim boxes, and metal or lockable lids are available to order  
**contact us on +44 (0) 345 600 6266**



## access floor service outlet boxes

### accessory plates and ancillary items



 Selection charts **p. 26-27**  
Dimensions and technical information **p. 31**

Lid and trim mouldings are precision engineered from hard wearing durable ABS. Lid is reinforced with a galvanised mild steel plate  
Mounting frame and box base - 0.9 mm thick galvanised steel  
Each compartment has 2 entries for 20 mm and 2 entries for 25 mm flexible conduits  
Grey mouldings. Alternative colours available to special order. Grey plates  
2, 3 and 4 compartment boxes are also available with separate individual compartment base units for convenient offsite pre-wiring  
Supplied in parts or fully assembled and configured to customer specification  
Conform to IEC-61534-22

Pack	Cat. Nos.	<b>1, 2 and 3 compartment accessory plates</b>
		<b>100 mm width</b>
1	CR020	Blank plate
1	CR022	2 gang switched socket outlet
1	CR023	2 gang switched socket outlet, low noise / clean earth
1	CR027	2 gang non-standard switched socket outlet
1	CR029	2 gang unswitched socket outlet
1	CR030	3 gang unswitched socket outlet
1	CR044	3 gang unswitched socket outlet, low noise / clean earth
1	CR036	2 gang RCD socket outlet
1	CR043	2 gang RCD socket outlet, low noise / clean earth
1	CR026	Punched plate for 2 x 1 gang accessories (60.3 mm fixing centres)
1	CR028	Punched plate for 2 gang accessories (120.6 mm fixing centres)
1	CR042	Angled punched plate for 4 x RJ45 (37 mm x 22 mm cut-outs)
1	CR031	2 x LJ2 accessory plate (50 mm fixing centres)
1	CR033	4 x BNC connector plate
1	CR024	4 x Data / telecoms plate (37 mm x 22 mm cut-outs)
1	CR025	6 x Data / telecoms plate (37 mm x 22 mm cut-outs)

Pack	Cat. Nos.	<b>4 compartment accessory plates</b>
		<b>75 mm compartment widths</b>
1	CR4100	Blank plate
1	CR4101	2 gang switched socket outlet
1	CR4102	2 gang switched socket outlet, low noise / clean earth
1	CR4103	2 gang non-standard switched socket outlet
1	CR4104	2 gang unswitched socket outlet
1	CR4105	3 gang unswitched socket outlet
1	CR4118	3 gang unswitched socket outlet, low noise / clean earth
1	CR4111	2 gang RCD socket outlet
1	CR4117	2 gang RCD socket outlet, low noise / clean earth
1	CR4115	Angled punched plate for 4 x RJ45 (37 mm x 22 mm cut-outs)
1	CR4106	2 x LJ2 accessory plate (50 mm fixing centres)
1	CR4108	4 x BNC connector plate
1	CR4112	4 x Data / telecoms plate (37 mm x 22 mm cut-outs)
1	CR4113	6 x Data / telecoms plate (37 mm x 22 mm cut-outs)

Pack	Cat. Nos.	<b>Ancillary items for service outlet boxes</b>
1	CR0001	Floor tile cut-out template – 2 compartment
1	CR0003	Floor tile cut-out template – 3 / 4 compartment
10	CR0000	Cable outlet flap
10	CR0010	Cable routers
50	CR0011	Screws for accessory plates
1	CR0012	Pack of 5 keys for use with lockable floor boxes
1	CR0021	Plastic lid and trim for 2 compartment floor box
1	CR0022	Plastic lid and trim for 3 / 4 compartment floor box
1	CR0023	Lockable lid assembly for 2 compartment floor box
1	CR0024	Lockable lid assembly for 3 / 4 compartment floor box
1	CR0005	Mounting frame for vinyl floor. For 2 compartment box Replaces mounting frame attached to base
1	CR0006	Mounting frame for vinyl floor. For 3 / 4 compartment box. Replaces mounting frame attached to base
10	CR0007	Floor box lid handle
1	CR0020	Metal lid and trim - replacement for 3 and 4 compartment boxes - powder coated grey

**Electrak tap-offs p. 10-14, 16-17**

# access floor pre-wired service outlet boxes

## 3 and 4 compartment



CR100



CR122

Selection chart **p. 27**  
 Dimensions and technical information **p. 31**

Electrak floor boxes can be supplied pre-wired to powertrack tap-offs with any variation of sockets, tap-offs, depth or other configuration

Pack	Cat. Nos.	<b>3 compartment pre-wired boxes with 1 x TSSO</b>	Pack	Cat. Nos.	<b>4 compartment pre-wired boxes with 1 x TSSO</b>
		<b>100 mm compartment widths</b>			<b>75 mm compartment widths</b>
		Single base – 85 mm depth, pre-wired with :			Single base – 85 mm depth, pre-wired with :
1	CR100	3 m Electrak 24 standard tap-off Cat. No. DP1332	1	CR120	3 m Electrak 24 standard tap-off Cat. No. DP1332
1	CR101	5 m Electrak 24 standard tap-off Cat. No. DP1532	1	CR121	5 m Electrak 24 standard tap-off Cat. No. DP1532
1	CR110	3 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2332	1	CR130	3 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2332
1	CR111	5 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2532	1	CR131	5 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2532
1	CR104	3 m Electrak 28 auxiliary earth tap-off Cat. No. YP5332	1	CR124	3 m Electrak 28 auxiliary earth tap-off Cat. No. YP5332
1	CR105	5 m Electrak 28 auxiliary earth tap-off Cat. No. YP5532	1	CR125	5 m Electrak 28 auxiliary earth tap-off Cat. No. YP5532
		<b>3 compartment pre-wired boxes with 2 x TSSO</b>			<b>4 compartment pre-wired boxes with 2 x TSSO</b>
		<b>100 mm compartment widths</b>			<b>75 mm compartment widths</b>
		Single base – 85 mm depth, pre-wired with :			Single base – 85 mm depth, pre-wired with :
1	CR102	3 m Electrak 24 standard tap-off Cat. No. DP1332	1	CR122	3 m Electrak 24 standard tap-off Cat. No. DP1332
1	CR103	5 m Electrak 24 standard tap-off Cat. No. DP1532	1	CR123	5 m Electrak 24 standard tap-off Cat. No. DP1532
1	CR112	3 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2332	1	CR132	3 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2332
1	CR113	5 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2532	1	CR133	5 m Electrak 25 low noise / clean earth tap-off Cat. No. JP2532
1	CR106	3 m Electrak 28 auxiliary earth tap-off Cat. No. YP5332	1	CR126	3 m Electrak 28 auxiliary earth tap-off Cat. No. YP5332
1	CR107	5 m Electrak 28 auxiliary earth tap-off Cat. No. YP5532	1	CR127	5 m Electrak 28 auxiliary earth tap-off Cat. No. YP5532

Pre-wired floor boxes can be supplied with RCD rather than standard sockets. Add an R to the end of the part numbers for an RCD version.  
 For example CR100R is a 3 compartment floor box with a twin RCD socket and a DP1332 tap-off

Also available :  
 - pre-wired boxes with fused tap-offs  
 - shallow or deep versions  
 - separate compartment bases

**contact us on +44 (0) 345 600 6266**





## access floor service outlet boxes

with RCD protection



CR4401

Selection charts **p. 26-27**  
Dimensions and technical information **(opposite)**

Electrak floor boxes are available with various RCD protection options and can be supplied pre-wired to powertrack tap-offs

Pack	Cat. Nos.	Floor boxes with RCD protection and 2 x TSSO
		<b>Boxes contain 1 spare 75 mm width compartment</b>
1	CR4400	Includes standard sockets
1	CR4401	Includes low noise sockets
		<b>Pre-wired RCD protected floor boxes</b>
		<b>Boxes contain RCD and 2 x TSSO with 1 spare 75 mm compartment</b>
1	CR4402	Pre-wired with Cat. No. DP1332 tap-off
1	CR4403	Pre-wired with Cat. No. DP1532 tap-off
1	CR4412	Pre-wired with Cat. No. JP2332 tap-off
1	CR4413	Pre-wired with Cat. No. JP2532 tap-off

## access floor service outlet boxes

technical information

### Floor boxes

#### Dimensions

Lid can accommodate carpets up to 6 mm depth  
Accessory plates are 172 mm long, with 162 mm fixing centres

#### Materials

Lid and trim mouldings are precision engineered from hard wearing durable ABS. Lid is reinforced with a galvanised mild steel plate  
Mounting frame and box base – 0.9 mm thick galvanised steel  
Floor service unit conforms to IEC-61534-22

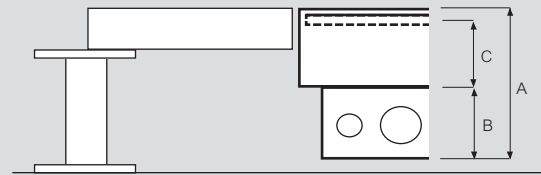
#### Wiring

Each compartment has 2 entries for 20 mm and 2 entries for 25 mm flexible conduits

#### Colour

Grey mouldings. Alternative colours available to special order  
Grey plates

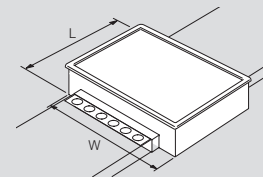
#### Dimensions from top of floor tile into floor void



A (mm)	B Accessory box depth (mm)	C Underside lid to top of accessory (plug clearance) (mm)
75	35	35
85	45	35
110	45	60

#### Screed floor boxes

Compartment	W (mm)	L (mm)
3C	350	245
4C	350	245



### To install access floor box



Cut hole in raised floor tile, lower complete box into aperture and push firmly down

#### Floor tile cut-out dimensions

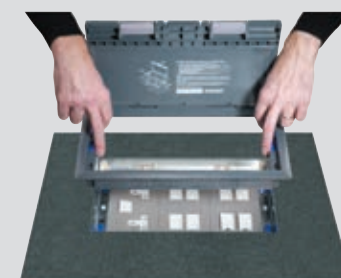
2 compartment : 263 mm x 203 mm<sup>1</sup>

3 and 4 compartment : 340 mm x 203 mm<sup>1</sup>

Floor cut-out aperture is the same for single base or separate compartment base

#### To fit carpet :

Detach lid and trim assembly by lifting the blue locking handles and lifting out. Cut and fit carpet. Push lid and trim assembly back into place



1 : The aperture dimension 203 mm has a fixing tolerance between 203 to 205 mm



# FLOOR GROMMETS

perfectly balancing

capacity & size

## ACCESS GROMMETS

The Electrak range of simple-to-install access grommets allow cables and conduit to link between underfloor power and desk power systems.

- Ranging from 144mm to 232mm in diameter
- 169mm diameter grommet can accommodate up to 3 x 32mm conduits - perfectly balancing capacity and size
- Push-fit lid with optional screw fixing to prevent unauthorised access



## POWER AND DATA GROMMETS

The Electrak range of cleaner's grommets are the latest addition to its power and data grommets range. Within their 169mm diameter, the grommet can house a flat RCD socket and provide ample space for the user to plug in or unplug equipment.

- Cleaner's grommet with flat mounted RCD socket or standard socket options
- Push-fit lid with cable flap feature
- Spring loaded screws for rapid installation
- Available pre-wired to powertrack tap-off

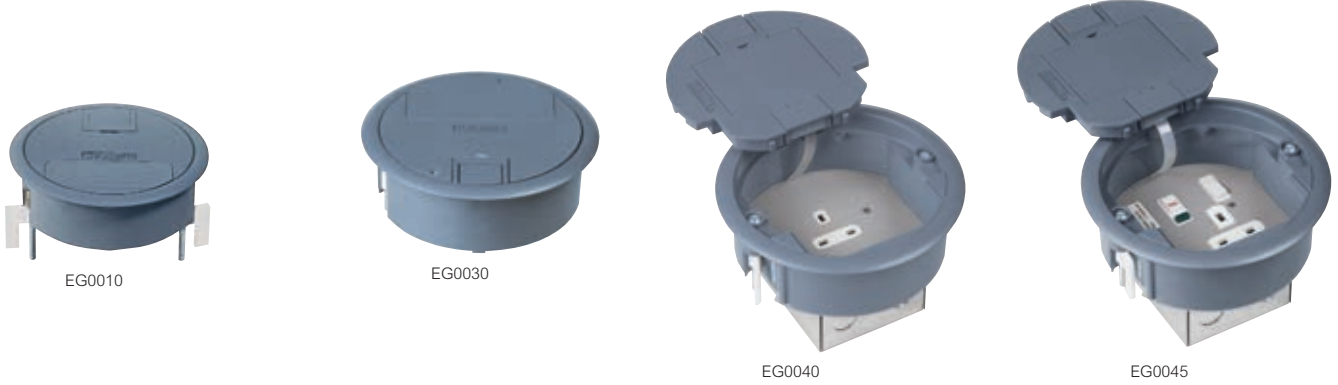


- 1 Removable inlay for optional carpet fitting
- 2 Cable flap allows permanent connection of services
- 3 Flat mounted RCD socket

- 4 169mm diameter provides the perfect balance between size and capacity
- 5 Spring loaded screws for rapid installation
- 6 Available pre-wired to powertrack tap-offs

# floor grommets

access / power and data



Dimensions and technical information p. 35

Pack	Cat. Nos.	Plastic access grommets	Pack	Cat. Nos.	Plastic power and data grommets
1	EG0010	<p>Quick fit installation Precision engineered from hard wearing durable ABS Grey mouldings. Other colours available to special order Conform to IEC-61534-22 Simply secured by pushing down the spring-loaded screws and rotating a quarter turn</p> <p><b>144 mm Ø – cut-out size 127 mm Ø</b></p> <p>Can accomodate all cable types or three metal conduits up to a 20 mm Ø or 25 mm without foam</p>	1	EG0040	<p><b>169 mm Ø – cut-out size 152 mm Ø</b></p> <p>Quick fit installation Precision engineered from hard wearing durable ABS Grey mouldings. Other colours available to special order. Conform to IEC-61534-22 Removable carpet recess Cable flap feature so grommet lid can be closed while in use Simply secured by pushing down the spring-loaded screws and rotating a quarter turn</p> <p><b>13 A power grommet</b> Supplied complete with 13 A unswitched socket</p>
1	EG0030	<p><b>169 mm Ø – cut-out size 152 mm Ø</b></p> <p>Allows power, data and flexible conduit up to 32 mm to pass through raised access floor Lid can be locked with screw (included) Maximum number of conduits : 9 x 20 mm Ø 5 x 25 mm Ø 3 x 32 mm Ø</p>	1	EG0045	<p><b>RCD power grommet</b> Supplied complete with 13 A RCD socket</p>
1	EG0055	<p><b>232 mm Ø – cut-out size 215 mm Ø</b></p> <p>High capacity grommet Recommended for installation in light traffic areas</p>	1	EG0051	<p><b>13 A power/data grommet</b> Supplied complete with 13 A socket and 1 x 37 x 22 mm cut-out</p>
1	EG0015	<p><b>Aluminium access grommet</b></p> <p>Body – cast aluminium Lid – injection moulded plastic Nylon 66 with neoprene cable gasket Secured by quarter-turn fasteners Floor depth 25 to 55 mm Access grommet depth 60 mm (95 mm when back box included)</p> <p><b>144 mm Ø – cut-out size 127 mm Ø</b></p> <p>Allows power, data and flexible conduit up to 25 mm to pass through raised access floor</p>	1	EG0052	<p><b>Data grommet</b> Supplied complete with data plate 2 x 37 x 22 mm cut-out</p>
1	EG0025	<p><b>Aluminium power grommet</b></p> <p><b>13 A power grommet</b> Supplied complete with 13 A switched socket</p>	1	EG0041	<p><b>Pre-wired power grommets</b></p> <p><b>169 mm Ø – cut-out size 152 mm Ø</b></p> <p><b>Cleaners socket version</b></p> <p>DP1332 - 3 m unfused DP1532 - 5 m unfused DP1313 - 3 m 13 A fused DP1513 - 5 m 13 A fused</p>
			1	EG0042	DP1532 - 5 m unfused
			1	EG0043	DP1313 - 3 m 13 A fused
			1	EG0044	DP1513 - 5 m 13 A fused
			1	EG0046	DP1332 - 3 m unfused
			1	EG0047	DP1532 - 5 m unfused
			1	EG0048	DP1313 - 3 m 13 A fused
			1	EG0049	DP1513 - 5 m 13 A fused

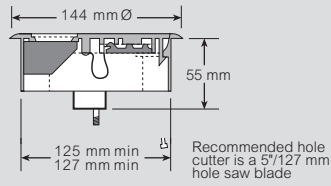
# floor grommets

## technical information

### ■ 144 mm Ø plastic floor grommet

#### Dimensions

Cat. No. EG0010

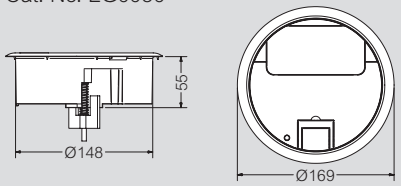


### ■ 169 mm Ø plastic floor grommets

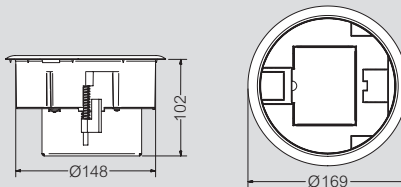
#### Dimensions

Access grommet

Cat. No. EG0030



Power grommet



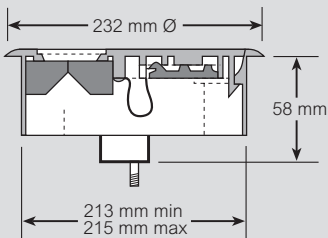
Recommended hole cutter is a 6"/152 mm hole saw blade

### ■ 232 mm Ø plastic floor grommet

#### Dimensions

Large quick fit grommet

Cat. No. EG0055

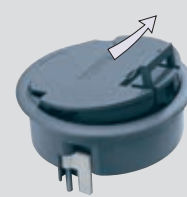


Floor panel cut-out diameter

Recommended hole cutter is a adjustable hole saw blade with Ø range of 40 mm - 300 mm

### ■ To install plastic floor grommets

A



Lift handle and pull to remove lid

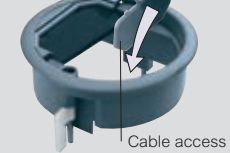
B



Push grommet into raised floor tile aperture  
Push down spring loaded screws and rotate quarter turn to secure

Ensure wings are located under floor panel  
For honeycombed floor panels one wing should face downwards and one wing should face upwards

C



Cable access insert  
Drop cable access insert into housing opening

D



Slide lid into lug holes

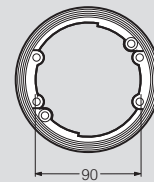
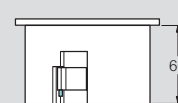
E



(1) Push down lid to close  
(2) If grommet is not in use, replace cable access insert

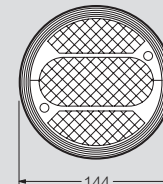
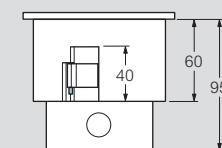
### ■ 144 mm Ø aluminium grommets

Access grommet



Cat. No. EG0015

13 A power grommet



Cat. No. EG0025

Recommended hole cutter is a 5"/127 mm hole saw blade

# INTERSOC-R™

fast, reliable, adaptable

modular  
desk power





## COMPLETE SOLUTIONS FOR DEMANDING ENVIRONMENTS

Intersoc-R is a modular desk power system designed to meet the demands of modern workplaces for faster and more adaptable solutions.

Designed with speed of installation and flexibility in mind, Intersoc-R's modular configuration enables thousands of different combinations to be made - providing solutions for every installation requirement.

- Modular system - rapid configuration and easy workstation relocation
- Push-fit connection - modules can simply be disconnected and additional modules inserted
- Busbar interconnection - no need for wiring
- Easily adapted to meet the changing demands of the workplace



# The next GENERATION of power distribution



Available in standard and clean earth versions, with fixed or rotatable socket options and a safe shuttered electrical connection, Intersoc-R is the next generation of power distribution...

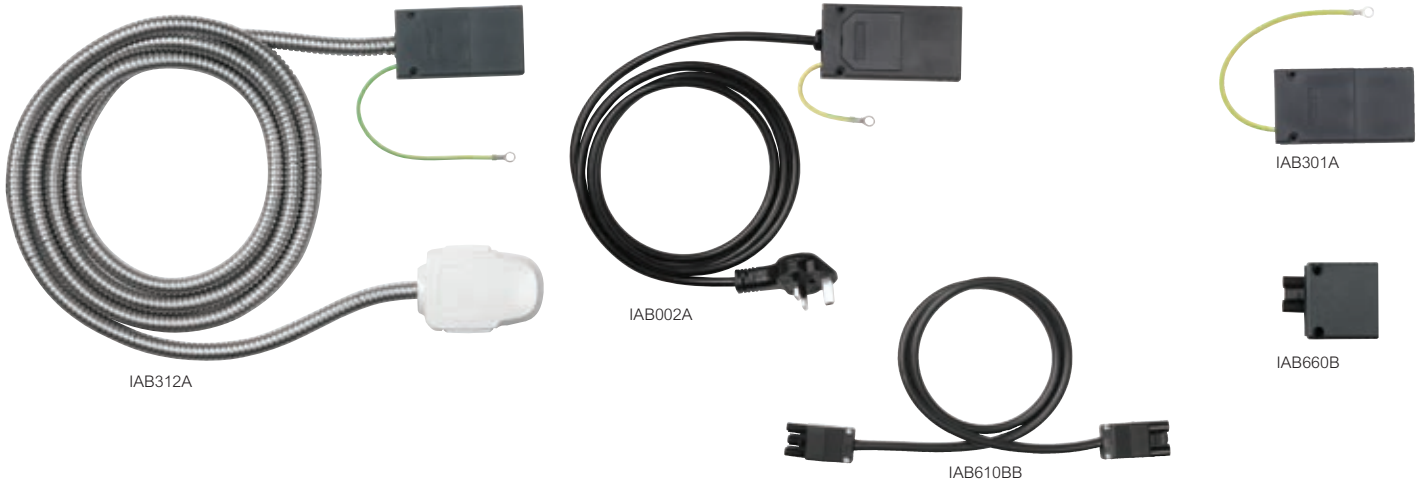
- Simple push-fit, module connection with auto-lock mechanism creates robust joints and makes installation quicker and easier
- 32 A system with safe shuttered electrical connections for additional safety, meets the requirements of BS 7671 : 2008 (including section 543.7)
- MCB, RCD and RCBO modules, with reversible hinged covers, provide a full range of circuit protection options
- 2, 3 or 4 gang British standard socket modules with fixed or rotatable, fused or unfused (BS 6396) sockets options - all the options you need to meet the requirements of any installation
- Outgoing connections: flexible interlink or end cap with ST or GST options

**NEW**  
Intersoc On-desk  
Personal power and data system

Find out more  
on page 46







Dimensions and technical information p. 42-45

Intersoc-R features fast modular connection with push-fit auto lock mechanism, safe shuttered electrical connections and a robustly designed rigid joint between modules. Available in standard and clean earth versions  
Independently approved by Intertek. Complies with BS 5733 and the relevant parts of BS 1363 part 2. Manufactured in an approved ISO 9001 : 2008 facility. Meets the requirements of BS 7671 : 2008 + AMD 3 : 2015 for high integrity earthing (section 543.7)

Pack	Cat. Nos.	32 A pre-wired feed modules
		<b>Standard earth tap-offs (E24 - White tap-off)</b>
1	IAB311A	3 m unfused metal tap-off Cat. No. DP1332
1	IAB312A	5 m unfused metal tap-off Cat. No. DP1532
1	IAB315A	3 m 13 A fused 543.7 metal tap-off Cat. No. DP1327
1	IAB316A	5 m 13 A fused 543.7 metal tap-off Cat. No. DP1527
		<b>Low noise / clean earth tap-offs (E25 - Green tap-off)</b>
1	IAC311A	3 m unfused metal tap-off Cat. No. JP2332
1	IAC312A	5 m unfused metal tap-off Cat. No. JP2532
1	IAC315A	3 m 13 A fused 543.7 metal tap-off Cat. No. JP2327
1	IAC316A	5 m 13 A fused 543.7 metal tap-off Cat. No. JP2527
		<b>Auxiliary earth tap-offs (E28 - Red tap-off)</b>
1	IAF311A	3 m unfused metal tap-off Cat. No. YP5332
1	IAF312A	5 m unfused metal tap-off Cat. No. YP5532
1	IAF315A	3 m 13 A fused 543.7 metal tap-off Cat. No. YP5327
1	IAF316A	5 m 13 A fused 543.7 metal tap-off Cat. No. YP5527

Pack	Cat. Nos.	32 A re-wirable feed modules
1	IAB301A	Standard earth (for flexible conduit)
1	IAC301A	Low noise (for flexible conduit)

Pack	Cat. Nos.	32 A feed units with in-built Neutrik connectors
1	IAB301E	Standard earth
1	IAC301E	Low noise

Pack	Cat. Nos.	32 A tap-offs pre-wired to Neutrik connectors
		<b>Standard earth tap-offs (E24)</b>
1	IAB311E	3 m unfused metal tap-off Cat. No. DP1332
1	IAB312E	5 m unfused metal tap-off Cat. No. DP1532
1	IAB315E	3 m 13 A fused 543.7 metal tap-off Cat. No. DP1327
1	IAB316E	5 m 13 A fused 543.7 metal tap-off Cat. No. DP1527
		<b>Low noise / clean earth tap-offs (E25)</b>
1	IAC311E	3 m unfused metal tap-off Cat. No. JP2332
1	IAC312E	5 m unfused metal tap-off Cat. No. JP2532
1	IAC315E	3 m 13 A fused 543.7 metal tap-off Cat. No. JP2327
1	IAC316E	5 m 13 A fused 543.7 metal tap-off Cat. No. JP2527

Pack	Cat. Nos.	16 A feed modules pre-wired to 13 A fused plug
1	IAB002A	With 2 m 1.5 mm <sup>2</sup> cable
1	IAB003A	With 3 m 1.5 mm <sup>2</sup> cable
1	IAB005A	With 5 m 1.5 mm <sup>2</sup> cable

Pack	Cat. Nos.	16 A rewirable feed modules
1	IAB201A	Rewirable feed module (for cable)

Pack	Cat. Nos.	16 A feed units with in-built GST connector
1	IAB660B	Compact feed module with male GST connector
1	IAB201B	Feed module with male GST and earth bond lead

Pack	Cat. Nos.	16 A pre-wired connection leads
		<b>13 A fused plug pre-wired to GST connector</b>
1	IAB002B	With 2 m 1.5 mm <sup>2</sup> cable
1	IAB003B	With 3 m 1.5 mm <sup>2</sup> cable
1	IAB005B	With 5 m 1.5 mm <sup>2</sup> cable

Pack	Cat. Nos.	GST to GST connection leads
1	IAB610BB	1 m length
1	IAB620BB	2 m length
1	IAB630BB	3 m length

# Intersoc-R™ desk modules

protection, BS sockets, end caps and interlinks



IAC502R



IAB402A



IAZ001A



IAB703A



IAB533F



IAB450A



IAB610B



IAB600B



IAB504R

 Dimensions and technical information p. 42-45

The BS version is available with fixed or rotatable sockets. Individually fused sockets are available to meet the requirements of BS 6396 : 2008 (5 x 20 mm anti-surge ceramic fuses)  
A wide range of interconnection solutions are available. When 16 A cabling interconnection is used with 32 A under desk solutions, suitable de-rating protection devices must be incorporated to protect the cables  
All protection and switching modules, end caps and interlinks are universally compatible with standard and clean earth / low noise systems

## Pack Cat. Nos. Protection and switching modules

1	IAB401A	With 13 A fuse
1	IAB402A	With 13 A fuse and sw/neon
1	IAB403A	With 13 A fuse and neon
1	IAB404A	32 A max. single isolation module
1	IAB405A	With 30 mA RCD
1	IAB408A	With neon indicator
1	IAB420A	With 16 A MCB
1	IAB430A	With 20 A MCB
1	IAB440A	With 32 A MCB
1	IAB450A	With 16 A RCBO
1	IAB460A	With 20 A RCBO
1	IAB470A	With 32 A RCBO

## Socket modules – standard (grey sockets)

<b>2 gang unfused</b>		
1	IAB502F	Fixed sockets
1	IAB502R	Rotatable sockets
<b>2 gang individually fused</b>		
1	IAB532F	3·15 A – fixed sockets
1	IAB532R	3·15 A – rotatable sockets
<b>3 gang unfused</b>		
1	IAB503F	Fixed sockets
1	IAB503R	Rotatable sockets
<b>3 gang individually fused</b>		
1	IAB533F	3·15 A – fixed sockets
1	IAB533R	3·15 A – rotatable sockets
<b>4 gang unfused</b>		
1	IAB504F	Fixed sockets
1	IAB504R	Rotatable sockets
<b>4 gang individually fused</b>		
1	IAB534F	3·15 A – fixed sockets
1	IAB534R	3·15 A – rotatable sockets

## Socket modules – low noise / clean earth (green sockets)

<b>2 gang unfused</b>		
1	IAC502F	Fixed sockets
1	IAC502R	Rotatable sockets
<b>2 gang individually fused</b>		
1	IAC532F	3·15 A – fixed sockets
1	IAC532R	3·15 A – rotatable sockets

## Pack Cat. Nos. Socket modules – low noise / clean earth (green sockets) (continued)

<b>3 gang unfused</b>		
1	IAC503F	Fixed sockets
1	IAC503R	Rotatable sockets
<b>3 gang individually fused</b>		
1	IAC533F	3·15 A – fixed sockets
1	IAC533R	3·15 A – rotatable sockets
<b>4 gang unfused</b>		
1	IAC504F	Fixed sockets
1	IAC504R	Rotatable sockets
<b>4 gang individually fused</b>		
1	IAC534F	3·15 A – fixed sockets
1	IAC534R	3·15 A – rotatable

## End cap

1	IAZ001A	Blank end cap
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## Intersoc to Intersoc pre-wired interconnection

<b>16 A</b>		
1	IAB603A	0·3 m length
1	IAB605A	0·5 m length
1	IAB610A	1 m length
1	IAB620A	2 m length
1	IAB630A	3 m length
1	IAB650A	5 m length
<b>32 A</b>		
1	IAB703A	0·3 m length
1	IAB705A	0·5 m length
1	IAB710A	1 m length
1	IAB720A	2 m length
1	IAB730A	3 m length
1	IAB750A	5 m length

## Power out end caps 16 A

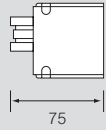
<b>Without flex</b>		
1	IAB600B	End cap with female GST connector
1	IAB600C	End cap with female ST connector
<b>With flex to female GST connector</b>		
1	IAB610B	1 m length
1	IAB620B	2 m length
1	IAB630B	3 m length

# Intersoc-R™ desk modules

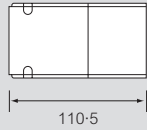
## technical information

### ■ Under-desk dimensions (mm)

Compact and GST feed unit



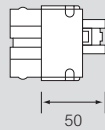
Feed unit



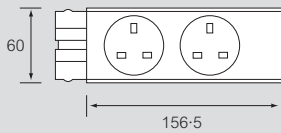
Blank end cap



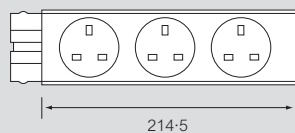
GST interconnect male



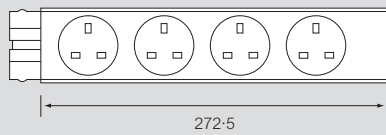
2 socket module<sup>1</sup>



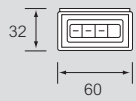
3 socket module<sup>1</sup>



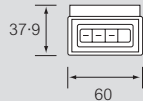
4 socket module<sup>1</sup>



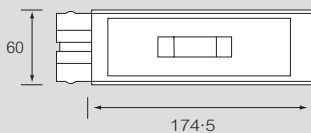
Fixed – end view



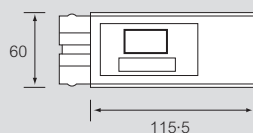
Rotatable – end view



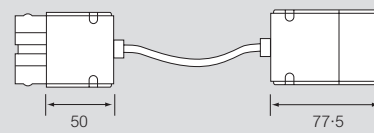
MCB, RCD protection module<sup>1</sup>



Protection module



Interconnection



<sup>1</sup> : 84.5 mm depth

## ■ Testing and accreditation



Intertek

Independently approved by Intertek  
Complies with BS 5733 and relevant parts of BS 1363-2  
Manufactured within an approved ISO 9001 : 2008 and  
ISO 14001 : 2004 facility  
Assessed quality assurance certificate No. 2029

Electrical test data	
Rated current	up to 32 A
Rated voltage	250 V ~
Frequency	50/60 Hz

Conductor resistance at 20°C	Fixed	Rotatable
	2 socket module	0.8 mΩ
4 socket module	1.6 mΩ	1.7 mΩ

Volt drop Live and neutral	
2 socket module	1.5 m V/A
4 socket module	3.0 m V/A
Protection module	4.0 m V/A
	(depending on device)
In-feeds :	
16 A	4.0 m V/A
+1.5 mm <sup>2</sup>	29 m V/A/m
32 A	2.0 m V/A
+4 mm <sup>2</sup>	11 m V/A/m
Interconnections :	
16 A/32 A	2.0 m V/A
+1.5 mm <sup>2</sup>	29 m V/A/m
+4 mm <sup>2</sup>	11 m V/A/m

Earth fault loop impedance	
2 socket module	1.5 mΩ
4 socket module	3.0 mΩ
Protection module	4.0 mΩ
	(depending on device)
In-feeds :	
16 A	2.0 mΩ
+1.5 mm <sup>2</sup>	29 mΩ/m
32 A	2.0 mΩ
+4 mm <sup>2</sup>	11 mΩ/m
Interconnections :	
16 A/32 A	4.0 m V/A
+1.5 mm <sup>2</sup>	29 mΩ/m
+4 mm <sup>2</sup>	11 mΩ/m

Mechanical data	
Number of conductors	3
Busbar conductor cross-sectional area	5 mm <sup>2</sup>
16 A rewirable in-feed terminal capacity	10 mm <sup>2</sup>
32 A rewirable in-feed terminal capacity	10 mm <sup>2</sup>

## ■ British Standards

BS 6396 : 2008 Electrical Systems in Office Furniture and Educational Furniture Specification

BS 7671 : 2008 incorporating amendment No. 3 : 2015. Requirements for Electrical Installation (IET Wiring Regulations 17th Edition)

### Electricity at Work Regulations 1989

### Health & Safety Legislation

Below is a brief outline of the main criteria within the standards :

BS 6396 : 2008 was published with regard to the use of electrical equipment within general office and educational furniture. This standard sets out in its scope the use and testing of electrical socket outlets and associated wiring when used together with a 13 A BS 1363 fused plug for mains supply and makes provision for the routing of cables through furniture

For compliance with this standard, socket outlet configurations of up to 4 outlets should be individually fused at 5 A and up to 6 outlets individually fused at 3.15 A

A note on individual socket fusing – BS 6396 Compliance :

The standard requires individual socket fusing (as per the table below)

Total number of sockets	Individually fused at
2, 3 or 4 sockets	5 A
5 or 6 sockets	3.15 A

Meets the requirements of BS 7671 : 2008

The Health and Safety Executive states that installations which conform to the standards laid down in BS 7671 : 2008 are regarded by the HSE as likely to achieve conformity with the relevant parts of the Electricity at Work Regulations 1989

Special note should be taken of regulation 543.7 within BS 7671 : 2008 - Earthing requirements for the installation of equipment having high protective conductor currents

Regulation 543.7 has particular importance when there is a requirement for a quantity of information technology equipment being supplied from a final circuit in a location where the sum of their protective currents exceeds 10 mA in normal use. Due to current in the protective conductor arising from the use of IT equipment, there is a requirement to provide mechanically protected 4 mm<sup>2</sup> conductor (543.7.1.103 (ii)). Intersoc achieves this when wired in accordance with the installation sheets by providing mechanically protected 5 mm<sup>2</sup> protective conductors within the product

Material specification	
Module housing	heat resistant ABS
Socket outlets	polycarbonate
Busbars	high conductivity copper CW004A (C101)
Other metalwork	phosphor bronze CW451K (PB102), CW452K (PB103)
	brass CW507L (CZ107), CW508L (CZ108)
	high conductivity copper CW004A (C101) <sup>1</sup>

1 : European grades with nearest British Standard shown in brackets

All dimensions (mm) are nominal

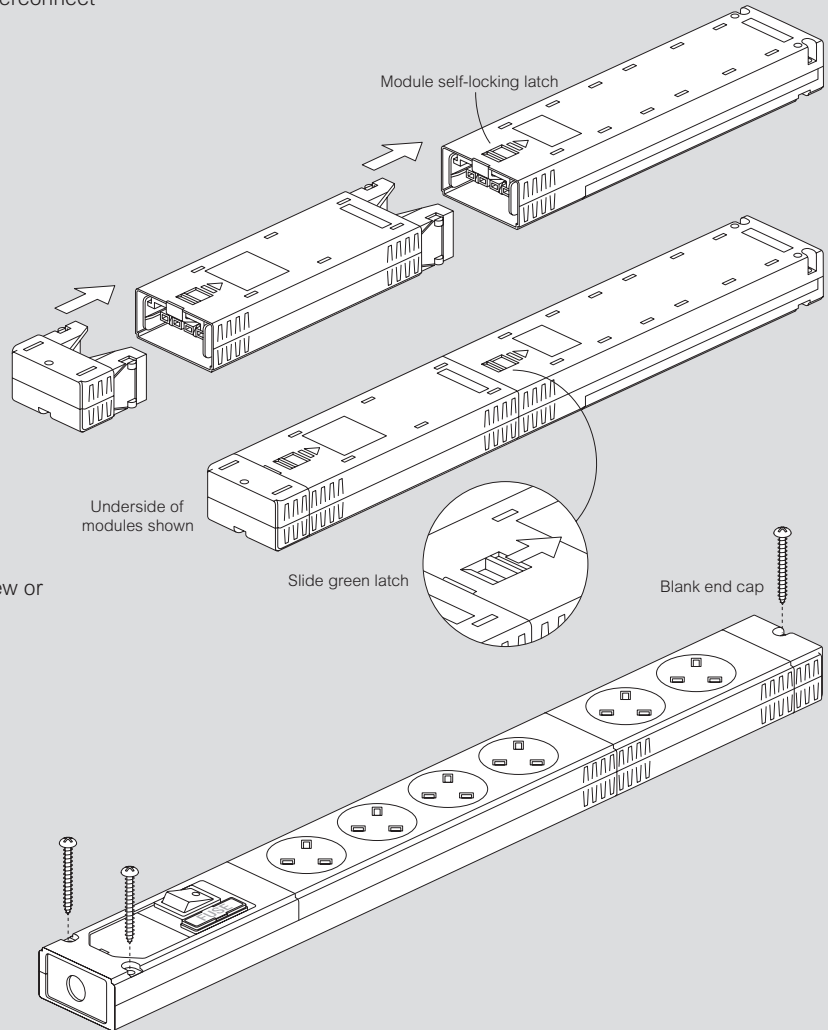
# Intersoc-R™ desk modules

## installation and configuration

### ■ Installation

#### To connect and disconnect Intersoc modules

1. Connection / disconnection to be made by a competent person
2. Before connecting modules ensure they are the correct way up and in line
3. Push modules together one at a time
4. Modules self-lock when fully pushed together
5. To disconnect modules slide green latch to unlock module and pull apart
6. Always end module run with blank end cap or interconnect

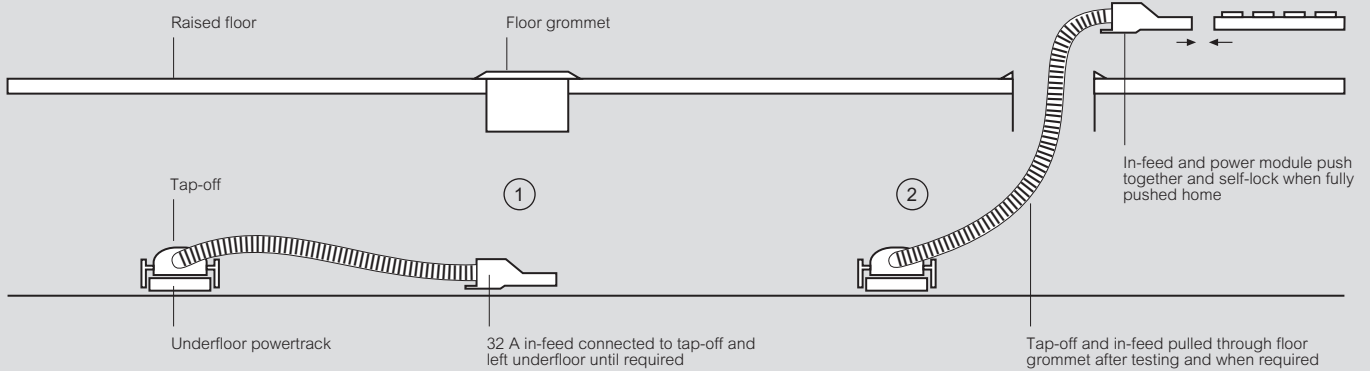


#### To fix modules to surface

1. Insert through all fixing holes no. 8 pozi-pan screw or M4 bolt to required length
2. Tighten screw / bolt down to mounting surface

## ■ Product configuration

1. Select the type of distribution system - standard, or low noise / clean earth
  2. Select the means of powering the system - cable or powertrack tap-off
  3. Select the type of in-feed module to match the cable capacity - 16 A or 32 A
  4. Select the means of protection
  5. Select the number of socket modules from the 2, 3 or 4 gang range (individually fused or unfused)
  6. Select fixed or rotatable sockets
  7. Select the interconnection units if required
  8. Finish system with the end cap
- (All modules push fit and lock together on-site or can be factory assembled to customer requirement)



# INTERSOC ON-DESK

power and data for  
modern workspaces



THE NEW INTERSOC  
ON-DESK RANGE BRINGS  
POWER, DATA AND RAPID  
USB CHARGING TO THE  
MODERN WORKSTATION

With clean lines and stylish aluminium and mirror white finish, Intersoc on-desk's ergonomic design blends in perfectly with contemporary office design schemes and enhances the functionality of the desk space.





# Tailored to your requirements

Configuring Intersoc on-desk modules to your exact requirements couldn't be simpler. Select any combination of power sockets and USB charging modules, and further enhance functionality with plug and play data solutions or Euro modules. Legrand's modular wiring accessories, including a range of AV solutions, can also be incorporated.

Putting 'personal' back into desk power and data... Intersoc on-desk can be tailored to the demands of any workstation



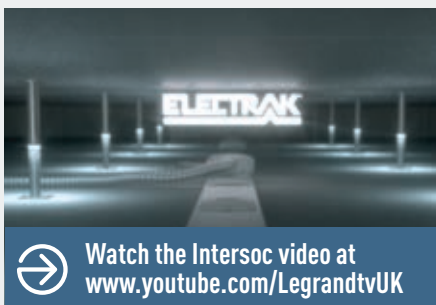
## RAPID USB CHARGING

Intelligent twin USB modules offer a high specification, rapid charge facility that keeps your mobile devices ready should you need to work on the move. Up to two devices (e.g. tablet and smart phone) can be simultaneously charged at a faster rate than common, lower output chargers.



## HIGH PERFORMANCE DATA

Intersoc on-desk offers plug and play CAT 5e and CAT 6 data options or CAT 6A keystone jack modules for higher performance. Euro module options are also available to accommodate a customer's specific data requirements. The innovative design of Intersoc on-desk enables data cables to neatly feed through the rear of the unit (see below).



Watch the Intersoc video at [www.youtube.com/LegrandtvUK](http://www.youtube.com/LegrandtvUK)

The entire Electrak system is powered by a reliable busbar backbone, from powertrack right through to on-desk modules.



Power is fed to the Intersoc on-desk unit via a choice of 13 A pre-wired plug, GST connector, or via an Intersoc-R under-desk connector.



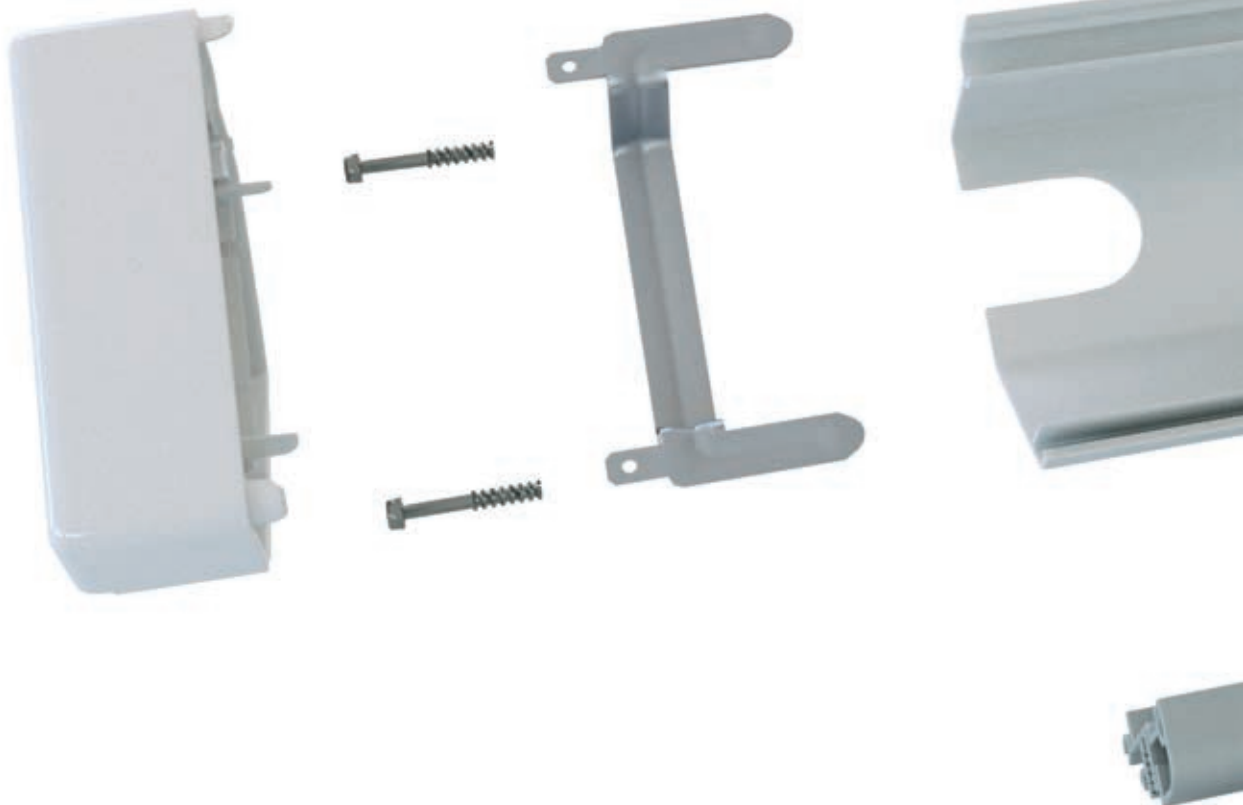
CAT 5e and CAT 6 data outlets are fed neatly from the rear of the unit via simple RJ45 connection (patch leads not supplied).

# RELIABLE DESKTOP CONNECTIVITY

INTERSOC ON-DESK...  
DELIVERING POWER,  
DATA AND RAPID USB  
CHARGING TO THE  
MODERN WORKPLACE

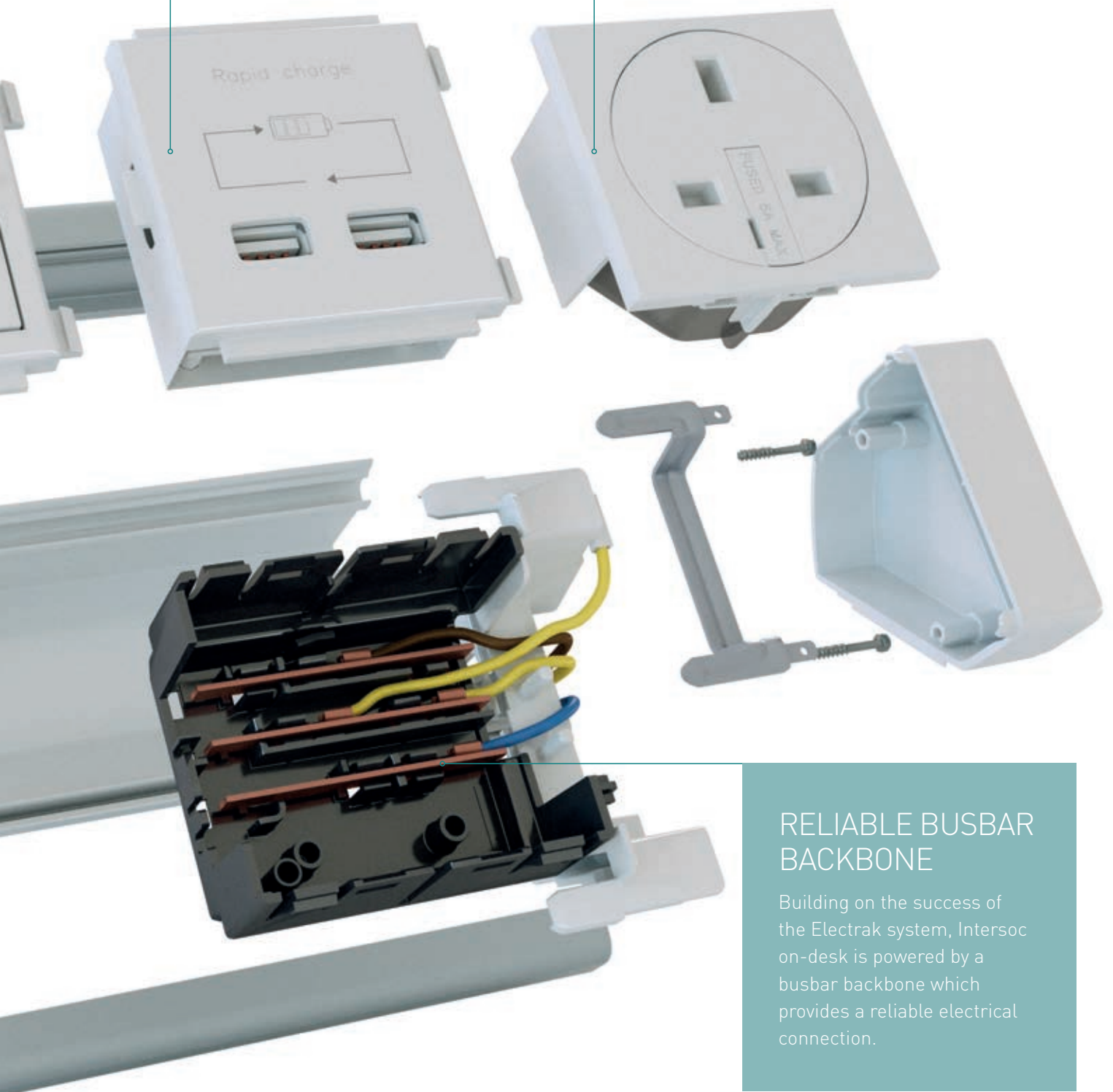
The fast pace of modern work practices combined with the need for instant connectivity is placing an ever greater reliance on the use of multiple devices, whether it be at our workstation or whilst we're on the move. The new range of Intersoc on-desk modules offers a convenient answer to the growing demand for user-specific desk power and data access.

CAT 5e / 6 / 6A  
RJ45 outlets



Rapid dual  
USB charging

BS and  
International  
socket options



## RELIABLE BUSBAR BACKBONE

Building on the success of the Electrak system, Intersoc on-desk is powered by a busbar backbone which provides a reliable electrical connection.

## Intersoc on-desk modules


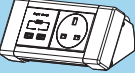
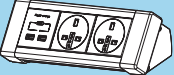
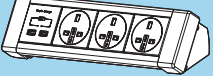
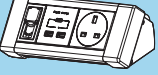









	Description	Pre-wired with 3 m flex and BS 1363 plug 	Pre-wired with 1.5 m flex and GST connector 	Pre-wired with 1.5 m flex and Intersoc-R connector 
		Cat. No.	Cat. No.	Cat. No.
	2 x sockets individually fused at 3·15 A	PA3320AA	PB1320AA	PD1320AA
	3 x sockets individually fused at 3·15 A	PA3330AA	PB1330AA	PD1330AA
	4 x sockets individually fused at 3·15 A	PA3340AA	PB1340AA	PD1340AA
	2 x sockets individually fused at 3·15 A plus 1 x rear pluggable CAT 5e / CAT 6 RJ45 outlet	PA3320AB	PB1320AB	PD1320AB
	2 x sockets individually fused at 3·15 A plus 2 x rear pluggable CAT 5e / CAT 6 RJ45 outlets	PA3320AC	PB1320AC	PD1320AC
	2 x sockets individually fused at 3·15 A plus 1 x rear pluggable data USB outlet	PA3320AD	PB1320AD	PD1320AD
	2 x sockets individually fused at 3·15 A plus 2 x rear pluggable data USB outlets	PA3320AE	PB1320AE	PD1320AE
	2 x sockets individually fused at 3·15 A plus 1 x CAT 6A RJ45 outlet with 3 m data lead	PA3320AF	PB1320AF	PD1320AF
	2 x sockets individually fused at 3·15 A plus 2 x CAT 6A RJ45 outlets with 3 m data leads	PA3320AG	PB1320AG	PD1320AG
	2 x sockets individually fused at 3·15 A plus carrier to accept 1 x Euro Module (25 x 50 mm)	PA3320AK	PB1320AK	PD1320AK
	2 x sockets individually fused at 3·15 A plus carrier to accept 2 x Euro Modules (50 x 50 mm)	PA3320AL	PB1320AL	PD1320AL
	3 x sockets individually fused at 3·15 A plus 1 x rear pluggable CAT 5e / CAT 6 RJ45 outlet	PA3330AB	PB1330AB	PD1330AB
	3 x sockets individually fused at 3·15 A plus 2 x rear pluggable CAT 5e / CAT 6 RJ45 outlets	PA3330AC	PB1330AC	PD1330AC
	3 x sockets individually fused at 3·15 A plus 1 x rear pluggable data USB outlet	PA3330AD	PB1330AD	PD1330AD
	3 x sockets individually fused at 3·15 A plus 2 x rear pluggable data USB outlets	PA3330AE	PB1330AE	PD1330AE

### Fixings

Description	Cat. No.
Desk clamp	0546 99

## Intersoc on-desk modules

with twin outlet USB charger

	Description	Pre-wired with 3 m flex and BS 1363 plug	Pre-wired with 1.5 m flex and GST connector	Pre-wired with 1.5 m flex and Intersoc-R connector
	Description	Cat. No.	Cat. No.	Cat. No.
	1 x unfused socket plus twin outlet USB charger	PA3012AA	PB1012AA	PD1012AA
	2 x sockets individually fused at 3.15 A plus twin outlet USB charger	PA3322AA	PB1322AA	PD1322AA
	3 x sockets individually fused at 3.15 A plus twin outlet USB charger	PA3332AA	PB1332AA	PD1332AA
	1 x unfused socket, twin outlet USB charger plus 1 x rear pluggable CAT 5e / CAT 6 RJ45 outlet	PA3012AB	PB1012AB	PD1012AB
	1 x unfused socket, twin outlet USB charger plus 2 x rear pluggable CAT 5e / CAT 6 RJ45 outlets	PA3012AC	PB1012AC	PD1012AC
	1 x unfused socket, twin outlet USB charger plus 1 x rear pluggable data USB outlet	PA3012AD	PB1012AD	PD1012AD
	1 x unfused socket, twin outlet USB charger plus 2 x rear pluggable data USB outlets	PA3012AE	PB1012AE	PD1012AE
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus 1 x rear pluggable CAT 5e / CAT 6 RJ45 outlet	PA3322AB	PB1322AB	PD1322AB
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus 2 x rear pluggable CAT 5e / CAT 6 RJ45 outlets	PA3322AC	PB1322AC	PD1322AC
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus 1 x rear pluggable data USB outlet	PA3322AD	PB1322AD	PD1322AD
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus 2 x rear pluggable data USB outlets	PA3322AE	PB1322AE	PD1322AE
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus 1 x CAT 6A RJ45 outlet with 3 m data lead	PA3322AF	PB1322AF	PD1322AF
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus 2 x CAT 6A RJ45 outlets with 3 m data leads	PA3322AG	PB1322AG	PD1322AG
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus carrier to accept 1 x Euro Module (25 x 50 mm)	PA3322AK	PB1322AK	PD1322AK
	2 x sockets individually fused at 3.15 A, twin outlet USB charger plus double carrier to accept 2 x Euro Modules (50 x 50 mm)	PA3322AL	PB1322AL	PD1322AL

### Notes:

Other options are available to special order. Contact us on +44 (0) 345 605 4333

CAT 5e / CAT 6 outlets have a rear facing RJ45 that will accept either CAT 5e or CAT 6 data cabling (no data cabling is included with the product)

CAT 6A outlets are supplied with 3 m pre-wired lead and performance certificate

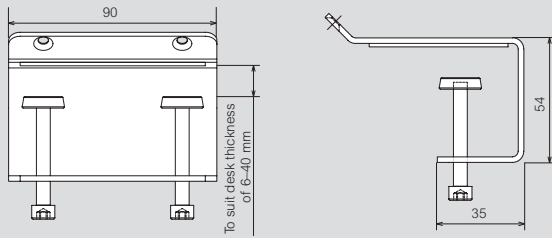
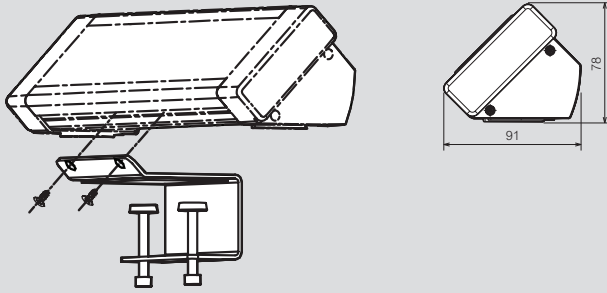
The data USB outlets have a short flying lead at the rear for USB connection to the PC (no additional data cabling is included with the product)

Units supplied with carriers to accept Euro Modules will be supplied with apertures at the rear for the passing of data or AV cables

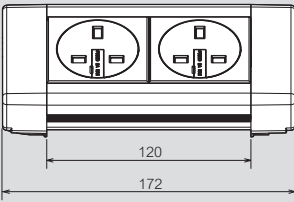
**Intersoc on-desk modules**

technical information

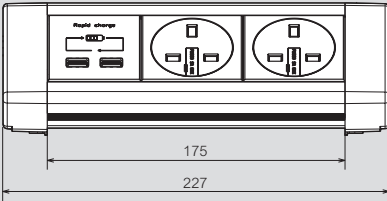
■ On-desk dimensions (mm)



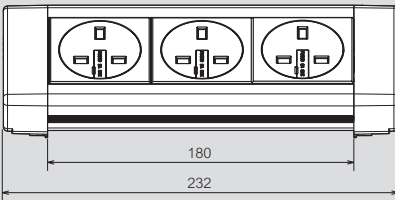
PA3320AA



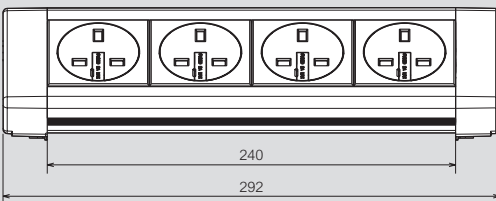
PA3322AA



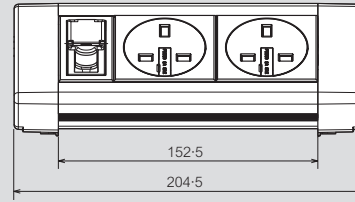
PA3330AA



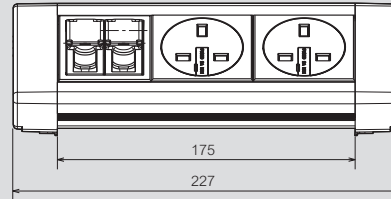
PA3340AA



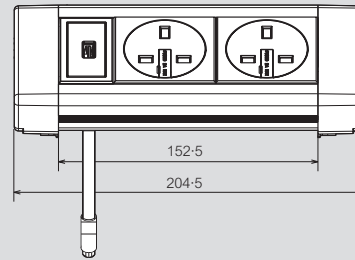
PA3320AB



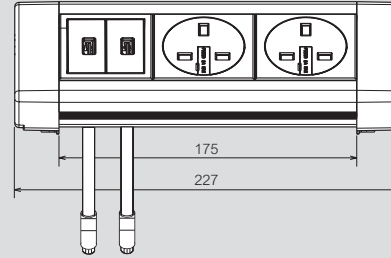
PA3320AC



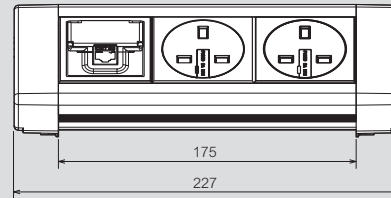
PA3320AD



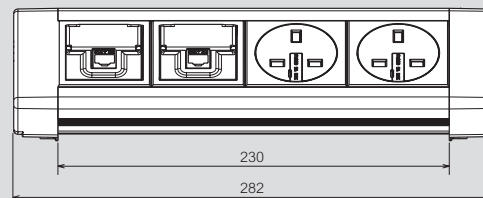
PA3320AE



PA3320AF



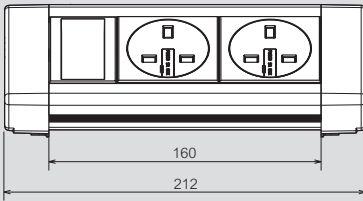
PA3320AG



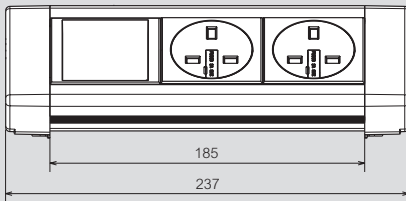
All dimensions (mm) are nominal

■ On-desk dimensions (mm) (continued)

PA3320AK



PA3320AL



All dimensions (mm) are nominal

■ Testing and accreditation



Complies with BS 5733 and relevant parts of BS 1363-2  
Manufactured within an approved ISO 9001 : 2008 and ISO 14001 : 2004 facility

■ BS 6396 : 2008

Electrical Systems in Office Furniture and Educational Furniture Specification

Below is a brief outline of the main criteria within the standards :

BS 6396 : 2008 was published with regard to the use of electrical equipment within general office and educational furniture. This standard sets out in its scope the use and testing of electrical socket outlets and associated wiring when used together with a 13 A BS 1363 fused plug for mains supply and makes provision for the routing of cables through furniture

The standard requires individual socket fusing (as per the table below)

Total number of sockets	Individually fused at up to
2, 3 or 4 sockets	5 A
5 or 6 sockets	3·15 A

BS 6396 : 2008 requires RCD protection for electrical sockets

**Material specification**

Module housing	aluminium / PVC
Module fascia	polycarbonate / ABS
Socket outlets	polycarbonate
End caps	ABS

**USB charger module specification**

Supply voltage (nominal)	230 V (AC)
Supply current	1·3 mA
Power consumption (max.)	0·3 W
Frequency	50 Hz
Output voltage	+5·0 V ± 0·25 (DC)
Output current	3·1 A
Output power	15 W (max.)
Over current protection	3·8 A (max.)
Output connectors	2 x USB Type A sockets
Current per socket	2·1 A (max.)

# BUSCOM TRUNKING

a unique

power & data backbone



Buscom is at the heart of Electrak's lighting control solutions... It provides a flexible and simple alternative to cabled installations.



## THE HEART OF YOUR LIGHTING CONTROL SYSTEM

Installing a matrix of Buscom trunking creates an accessible power and communications backbone. The backbone can be tapped into at any point to facilitate instant connection to power and control circuits. Buscom incorporates an integral shielded twisted pair, and is suitable for use with any lighting control protocol, including: KNX, LonWorks and DALI.

## MODULAR. FLEXIBLE. SIMPLE.

Trunking lengths simply push fit together, saving time and money on installation. With cable terminations only required for power and control circuits in the feed unit, Buscom delivers a plug and play solution that allows for future lighting layout changes to be made quickly and efficiently.



## BUSCOM ADDS A NEW DIMENSION TO LIGHTING BUSBAR

Buscom extends the unquestionable plug and play advantages from the power circuit to the control circuit.

This unique system for distributing lighting control signals delivers unrivalled flexibility, regardless of the location of the intelligence...

- Power and communications within a single trunking system
- Suitable for use with any lighting control protocol, including: KNX, LonWorks and DALI
- Modular, flexible system which is quick and simple to install and adapt
- Reduced potential points of failure in comparison with traditional wiring installations

# THE INTELLIGENT SOLUTION

### INTELLIGENCE IN THE PANEL



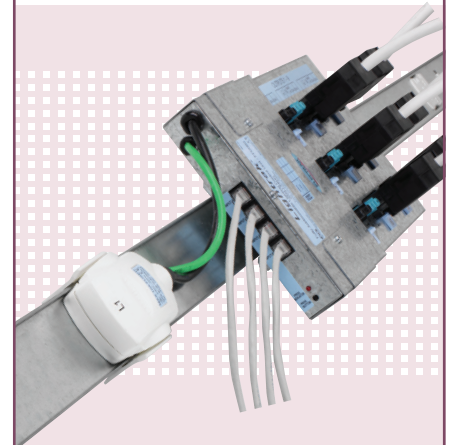
Lighting control modules located in a central cabinet are connected to the Buscom system via communication circuits that terminate in the feed unit. Control signals are then distributed along the trunking run and made available at any tap-off outlet.

### INTELLIGENCE IN THE BUSBAR



Integrating lighting control technology into the Buscom feed unit is particularly effective for DALI control. Each trunking run converts to an individual DALI network into which luminaires can tap-in at any point.

### INTELLIGENCE IN THE LCU



Lighting control units (LCUs) are mounted onto and plugged into Buscom trunking, providing a hub for multiple luminaires and switching devices to plug into. Buscom's integrated communication bus provides the backbone network to control all devices.

**Visit [www.legrand.co.uk](http://www.legrand.co.uk) for more information**

# Electrak® 30 2P + E buscom trunking

power and communication distribution



CCA3145C



CCA2145C



CCA14RFC

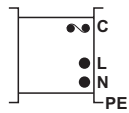


CCA14LFC

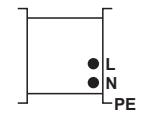
Dimensions and technical information p. 60-65

Integral communication bus suitable for KNX, Lonworks, DALI protocols, etc. 25 A and 40 A systems  
IP 4X ingress protection  
Fast installation (trunking push fits together in seconds). High quality materials

Pack	Cat. Nos.	<b>Electrak 30 2P + E with comms</b>
		2P + E buscom trunking system with integral communications bus circuit Socket outlets colour coded white
		<b>Trunking lengths</b>
		Trunking lengths push fit into each other, and feed units. Trunking lengths can be suspended using the various bracket options
	25 A	Length (m)   Tap-off outlets   Weight (kg)
1	BBA3145C	3   6   4.47
1	BBA2145C	2   4   3.27
	40 A	Length (m)   Tap-off outlets   Weight (kg)
1	CCA3145C	3   6   4.57
1	CCA2145C	2   4   3.36



Pack	Cat. Nos.	<b>Electrak 30 2 P + E without comms</b>
		2P + E busbar (power only) trunking system Socket outlets colour coded white
		<b>Trunking lengths</b>
		Trunking lengths push fit into each other, and feed units or flexible lengths. Trunking lengths can be surface mounted suspended using the various bracket options
	25 A	Length (m)   Tap-off outlets   Weight (kg)
1	BBA3145	3   6   4.47
1	BBA2145	2   4   3.27
	40 A	Length (m)   Tap-off outlets   Weight (kg)
1	CCA3145	3   6   4.57
1	CCA2145	2   4   3.36



Pack	Cat. Nos.	<b>Feed units (with comms)</b>
		Feed units come with 2 x 25 mm Ø and 2 x 16 mm Ø cable entry holes and single screw cable terminals for power and data Left feed units are supplied with right end stop Right feed units are supplied with left end stop
		<b>Suspended</b>
		Weight (kg)
1	BBA14LFC	25 A left   1.22
1	BBA14RFC	25 A right   1.49
1	CCA14LFC	40 A left   1.27
1	CCA14RFC	40 A right   1.49

Pack	Cat. Nos.	<b>Feed units (without comms – power only)</b>
		Feed units come with 2 x 25 mm Ø cable entry holes and single screw cable terminals Left feed units are supplied with right end stop Right feed units are supplied with left end stop
		<b>Suspended</b>
		Weight (kg)
1	BBA14LF	25 A left   1.22
1	BBA14RF	25 A right   1.49
1	CCA14LF	40 A left   1.27
1	CCA14RF	40 A right   1.49

# Electrak® 32 4P + E (dual circuit) buscom trunking

power and communication distribution



CCC3145C



CCC2145C



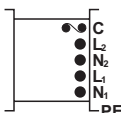
CCC14RFC

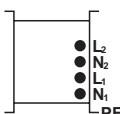


CCC14LFC

 Dimensions and technical information p. 60-65

Integral communication bus suitable for KNX, Lonworks, DALI protocols, etc. 25 A and 40 A systems  
IP 4X ingress protection  
Fast installation (trunking push fits together in seconds). High quality materials

Pack	Cat. Nos.	<b>Electrak 32 4P + E (dual circuit) with comms</b>									
		Dual circuit buscom trunking system with integral communications bus circuit Socket outlets colour coded white									
		<b>Trunking lengths</b>									
		Trunking lengths push fit into each other, and feed units. Trunking lengths can be suspended using the various bracket options									
		<table border="1"> <thead> <tr> <th>Length (m)</th> <th>Tap-off outlets</th> <th>Weight (kg)</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>6</td> <td>4.77</td> </tr> <tr> <td>2</td> <td>4</td> <td>3.47</td> </tr> </tbody> </table>	Length (m)	Tap-off outlets	Weight (kg)	3	6	4.77	2	4	3.47
Length (m)	Tap-off outlets	Weight (kg)									
3	6	4.77									
2	4	3.47									
1	25 A BBC3145C										
1	BBC2145C										
1	40 A CCC3145C	<table border="1"> <thead> <tr> <th>Length (m)</th> <th>Tap-off outlets</th> <th>Weight (kg)</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>6</td> <td>4.97</td> </tr> <tr> <td>2</td> <td>4</td> <td>3.61</td> </tr> </tbody> </table>	Length (m)	Tap-off outlets	Weight (kg)	3	6	4.97	2	4	3.61
Length (m)	Tap-off outlets		Weight (kg)								
3	6	4.97									
2	4	3.61									
1	CCC2145C										

Pack	Cat. Nos.	<b>Electrak 32 4P + E (dual circuit) without comms</b>									
		Dual circuit busbar trunking system Socket outlets colour coded white									
		<b>Trunking lengths</b>									
		Trunking lengths push fit into each other, and feed units. Trunking lengths can be suspended using the various bracket options									
		<table border="1"> <thead> <tr> <th>Length (m)</th> <th>Tap-off outlets</th> <th>Weight (kg)</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>6</td> <td>4.77</td> </tr> <tr> <td>2</td> <td>4</td> <td>3.47</td> </tr> </tbody> </table>	Length (m)	Tap-off outlets	Weight (kg)	3	6	4.77	2	4	3.47
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2	4	3.47									
1	25 A BBC3145										
1	BBC2145										
1	40 A CCC3145	<table border="1"> <thead> <tr> <th>Length (m)</th> <th>Tap-off outlets</th> <th>Weight (kg)</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>6</td> <td>4.97</td> </tr> <tr> <td>2</td> <td>4</td> <td>3.61</td> </tr> </tbody> </table>	Length (m)	Tap-off outlets	Weight (kg)	3	6	4.97	2	4	3.61
Length (m)	Tap-off outlets		Weight (kg)								
3	6	4.97									
2	4	3.61									
1	CCC2145										

Pack	Cat. Nos.	<b>Feed units (with comms)</b>										
		Feed units come with 2 x 25 mm Ø and 2 x 16 mm Ø cable entry holes and single screw cable terminals for power and data Left feed units are supplied with right end stop Right feed units are supplied with left end stop										
		<b>Suspended</b>										
		<table border="1"> <thead> <tr> <th></th> <th>Weight (kg)</th> </tr> </thead> <tbody> <tr> <td>25 A left</td> <td>1.29</td> </tr> <tr> <td>25 A right</td> <td>1.52</td> </tr> <tr> <td>40 A left</td> <td>1.38</td> </tr> <tr> <td>40 A right</td> <td>1.61</td> </tr> </tbody> </table>		Weight (kg)	25 A left	1.29	25 A right	1.52	40 A left	1.38	40 A right	1.61
	Weight (kg)											
25 A left	1.29											
25 A right	1.52											
40 A left	1.38											
40 A right	1.61											
1	BBC14LFC	25 A left										
1	BBC14RFC	25 A right										
1	CCC14LFC	40 A left										
1	CCC14RFC	40 A right										

Pack	Cat. Nos.	<b>Feed units (without comms – power only)</b>										
		Feed units come with 2 x 25 mm Ø cable entry holes and single screw cable terminals Left feed units are supplied with right end stop Right feed units are supplied with left end stop										
		<b>Suspended</b>										
		<table border="1"> <thead> <tr> <th></th> <th>Weight (kg)</th> </tr> </thead> <tbody> <tr> <td>25 A left</td> <td>1.29</td> </tr> <tr> <td>25 A right</td> <td>1.52</td> </tr> <tr> <td>40 A left</td> <td>1.38</td> </tr> <tr> <td>40 A right</td> <td>1.61</td> </tr> </tbody> </table>		Weight (kg)	25 A left	1.29	25 A right	1.52	40 A left	1.38	40 A right	1.61
	Weight (kg)											
25 A left	1.29											
25 A right	1.52											
40 A left	1.38											
40 A right	1.61											
1	BBC14LF	25 A left										
1	BBC14RF	25 A right										
1	CCC14LF	40 A left										
1	CCC14RF	40 A right										

# Electrak® buscom trunking tap-offs

power and communication distribution



DDJ45C



DDJ45



DDK4F

Dimensions and technical information p. 60-65

Pack	Cat. Nos.	Tap-off units with comms		
		Tap-offs with comms can only be plugged into outlets that have the comms facility		
		<b>16 A unfused tap-off units</b>		
		Pre-wired tap-off units to pick up L1+N1 or L2+N2, colour coded white		
		Length (m)	Fixed polarity	Weight (kg)
1	DDE43C	3	L1 + N1	0.5
1	DDE45C	5		0.6
1	DDJ43C	3	L2 + N2	0.5
1	DDJ45C	5		0.6
		<b>13 A fused tap-off units</b>		
		Pre-wired tap-off units to pick up L1+N1 or L2+N2, supplied with BS 1362 fuse, colour coded white		
		Length (m)	Fixed polarity	Weight (kg)
1	DDE43FC	3	L1 + N1	0.5
1	DDE45FC	5		0.6
1	DDJ43FC	3	L2 + N2	0.5
1	DDJ45FC	5		0.6

Pack	Cat. Nos.	Tap-off units without comms (power only)		
		Power only tap-offs can plug into any tap-off outlet		
		<b>16 A unfused tap-off units</b>		
		Pre-wired tap-off units to pick up L1+N1 or L2+N2, colour coded white		
		Length (m)	Fixed polarity	Weight (kg)
1	DDE43	3	L1 + N1	0.5
1	DDE45	5		0.6
1	DDJ43	3	L2 + N2	0.5
1	DDJ45	5		0.6
		<b>13 A fused tap-off units</b>		
		Pre-wired tap-off units to pick up L1+N1 or L2+N2, supplied with BS 1362 fuse, colour coded white		
		Length (m)	Fixed polarity	Weight (kg)
1	DDE43F	3	L1 + N1	0.5
1	DDE45F	5		0.6
1	DDJ43F	3	L2 + N2	0.5
1	DDJ45F	5		0.6

Pack	Cat. Nos.	Tap-off units without comms – rewirable		
		<b>16 A unfused tap-off units</b>		
		Rewirable tap-off units to pick up required circuit, colour coded white, can plug into any tap-off outlet		
		Fixed polarity	Weight (kg)	
1	DDF4	L1 + N1	0.14	
1	DDK4	L2 + N2	0.14	
		<b>13 A fused tap-off units</b>		
		Rewirable tap-off units to pick up required circuit, supplied with BS 1362 fuse, colour coded white, can plug into any tap-off outlet		
		Fixed polarity	Weight (kg)	
1	DDF4F	L1 + N1	0.14	
1	DDK4F	L2 + N2	0.14	

## Electrak® buscom trunking accessories

### fixings and ancillary items



EEA308



EEA312



EEC348



EEC356



EEB340



EEB344



EEA328



EEA324



EEC352



EEC364

### Dimensions and technical information p. 60-65

Brackets are manufactured from robust galvanised steel, ensuring that the entire installation can be expected to stand up to all normal site conditions

Pack	Cat. Nos.	Fixings
1	EEA308	Trunking suspended fixing bracket
1	EEA312	Trunking suspended fixing bracket c/w cable duct stirrup. Used when running cable duct on top of buscom trunking
1	EEA324	Luminaire suspension fixing bracket
1	EEA328	Luminaire 45 mm edge suspension fixing bracket (clip on)
1	EEB340	Open hook luminaire suspended bracket
1	EEB344	Closed ring on luminaire
1	EEC348	Cable duct 3 m long x 50 mm(w) x 13 mm(h)
1	EEC357	Joint bracket cable duct
1	EEC352	Cable duct fixing bracket

Pack	Cat. Nos.	Ancillary items
1	EEC356	2 m empty length for adjusting the length at the end of a run (to be cut)
1	EEC364	Joint sleeve is used if load is hung off trunking joint or near when joint is centre of a fixing span
1	EEC366	Left hand end stop spare
1	EEC368	Right hand end stop spare

### Standards



Intertek

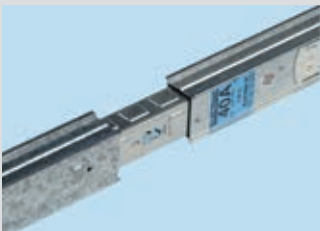
ASTA approved to BS EN 60439-2 and IEC 439-2  
 Designed to meet the requirements of BS EN 61534-21 : 2014  
 Manufactured within an approved ISO 9001 : 2008 and  
 ISO 14001 :2004 facility  
 Assessed Quality Assurance Certificate No. 10679  
 Electrak Buscom fully complies with the requirements of BS 7671 :2008  
 + AMD 3 : 2015 (IET Wiring Regulations)

### Buscom trunking options

- L
- N
- PE
- L2
- N2
- L1
- N1
- PE
- Communication bus

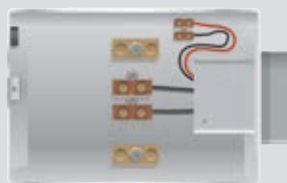
Electrak buscom trunking can be used with Electrak's cost effective lighting control system, Lightrak KNX, or any other systems using control protocols such as KNX, Lonworks, DALI, etc.  
 Electrak's overhead trunking couples high quality engineering with rigidity of design, and provides power for a variety of applications including lighting, heating and ventilation. The robust easy fix modular system permits loads to be suspended directly from the trunking using Electrak's various fixing brackets  
 Push fit connection keeps installation costs to a minimum

### Track lengths simply push fit together



### Feed units

25 A rated - max. conductor size 6 mm<sup>2</sup>  
 40 A rated - max. conductor size 16 mm<sup>2</sup>  
 IP 4X galvanised steel



2 pole + earth + comms  
 Comms bus  
 Max. conductor size 1.5 mm<sup>2</sup>  
 Red +  
 Black -

Electrical test data	25 A	40 A	UOM
Derating factor for Electrak 32 single sided	–	0.8	–
Rated operational voltage (Ue)	230/400	230/400	V~
Rated insulation voltage (Ui)	500	500	V~
Frequency (f)	50/60	50/60	Hz
Rated impulse withstand voltage	4.0	4.0	KV
Busbar resistance (R <sub>20</sub> )	3.9	2.7	mΩ/m
Resistance (R <sub>1</sub> )	4.2	3.0	mΩ/m
Impedance (Z <sub>1</sub> )	4.8	3.4	mΩ/m
Reactance (X <sub>1</sub> )	2.5	1.6	mΩ/m
Protective conductor	1.5	1.5	mΩ/m

Volt drops	25 A	40 A	UOM
Live and neutral : busbars	9.0	6.0	mV/A/m
(R <sub>1</sub> +R <sub>2</sub> ) Feed unit	3.0	2.4	mV/A
Tap-off 0.8 m	22.0	22.0	mV/A
Tap-off 2.0 m	52.0	52.0	mV/A

Earth fault loop	25 A	40 A	UOM
Impedance : busbar	4.5	3.0	mΩ/m
Earth housing	1.5	1.5	mΩ/m
Feed unit	2.4	2.4	mΩ
Tap-off 0.8m	23.0	23.0	mΩ
Tap-off 2.0m	53.0	53.0	mΩ
Rated conditional short-circuit current (I <sub>cc</sub> )	16.0	16.0	KA
Rated short time withstand current (I <sub>cw</sub> ) at 1 sec	0.65	1.0	KA
Rated peak short-circuit current (I <sub>pk</sub> )	0.975	1.5	KA
Ambient temperature	35.0	35.0	°C

Mechanical data	25 A	40 A	UOM
Number of conductors	2.6	2.6	–
Busbar conductor cross-sectional area	4.0	6.0	mm <sup>2</sup>
Cable terminal capacity	6.0	16.0	mm <sup>2</sup>
Cable terminal capacity bus	1.5	1.5	mm <sup>2</sup>
Tap-off cable 16 A	1.5	1.5	mm <sup>2</sup>
Tap-off cable 13 A fused	1.5	1.5	mm <sup>2</sup>
Tap-off entry	16.0	16.0	mmØ
Feed unit entry holes power	25.0	25.0	mmØ
Feed unit entry holes bus	16.0	16.0	mmØ
IP rating	4 X	4 X	–

Direct protection by enclosure. Indirect protection by protective circuit

All dimensions (mm) are nominal

# Electrak® buscom trunking

## technical data

### Communication control circuit

Type	Bus cable (LSOH)
Construction	Sheathed 0.5 mm <sup>2</sup> copper twisted pair
Insulation - conductor	Flame retardant low emission HCL
Sheath	LSOH material
Rated insulation voltage (Ui) (between power circuit and bus)	500 V
Max. bus operating voltage	50 V
Max. bus operating current	0.65 A
Max. conductor resistance (@20°C)	73.2 Ω/km
Max. mutual capacitance	100 nf/km
Material specifications	
Buscom trunking housing	Galvanised steel
Busbars	High conductivity copper
Busbar insulator	Flame retardant LSOH to BS 7211
Trunking connector / tap-off entry box / cable connector	Flame retardant polycarbonate
Tap-off housing	Flame retardant polycarbonate
Trunking connector blades / tap-off blades	Copper
Feed unit IP 4X	Galvanised steel
Feed unit IP 54	ABS
Flexible length conduit	Flame retardant LSOH nylon
Feed unit terminals / earth block	Brass
Brackets	Galvanised steel
13 A tap-off, fuse	To BS 1362, ASTA approved

### Durability

Electrak power and communications distribution systems are well designed and extremely robust. They can be expected to stand up to all normal site conditions. Electrak Buscom has been short circuit strength tested by ASTA

### Earth fault loop impedance

BS 7671 : 2008 IET Wiring Regulations require accurate determination of the total earth loop impedance, which must be sufficiently low to allow the protective device to operate within the specified time, which for socket outlets is 0.4 seconds

The values relevant to Electrak Buscom for calculating the earth fault loop impedance are shown in the electrical test data table, see opposite

### Buscom trunking rating in ambient temperatures

Average ambient air temperature	25°C	30°C	35°C	40°C	45°C	50°C
Rating factor (K1)	1.1	1.05	1	0.95	0.90	0.85

For ambient temperatures other than 35°C apply the multiplier factor K1 to the rated current

### Buscom trunking mechanical loading

For point loads and evenly distributed loads the maximum weight that can be supported is given below

#### Maximum loading for suspended buscom trunking

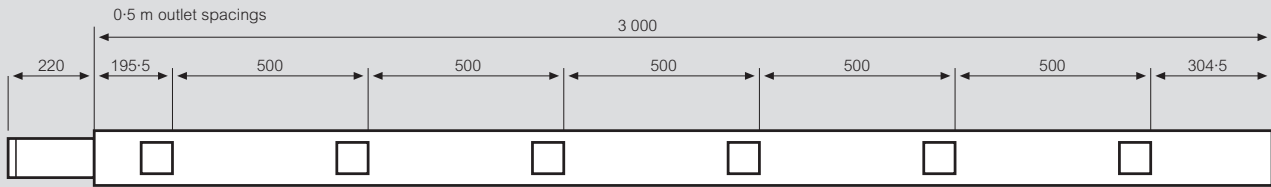
Fixing distance (m)	1.5	2	2.5	3	3.5	4
Max. point load (deflection = 1/500 x span) (Kg)	20	17	13	12	9	7
Max. distributed load (deflection = 1/500 x span) (Kg)	33	28	22	20	15	12
Max. point load (deflection = 1/350 x span) (Kg)	33	24	18	16	10	9
Max. distributed load (deflection = 1/350 x span) (Kg)	55	40	30	26	16	15

### Notes

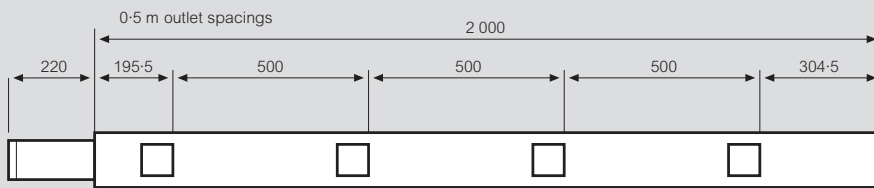
- Where trunking joints occur in the middle of the suspension span, and weight is to be suspended from that point, it is recommended to use a strengthening bracket EEC364 over the joint to stop deflection
- If the load requirements exceed the above figures, please contact us on +44 (0) 345 600 6266  
For design information and technical specification, please contact us on +44 (0) 345 600 6266  
Suspension rods and fixings should be of suitable size to carry the weight of both the track and suspended load

■ **Fixing dimensions**

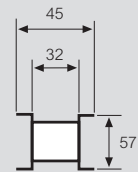
**Buscom trunking 3 m**



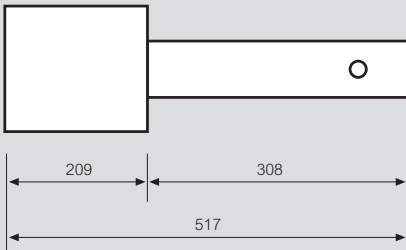
**Buscom trunking 2 m**



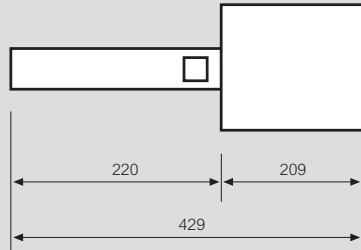
**Buscom trunking End view**



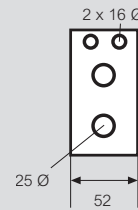
**Feed unit – left**



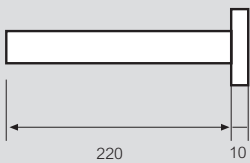
**Feed unit – right**



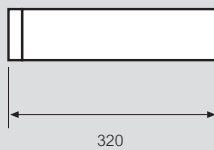
**Suspended feed unit**



**End stop – right**

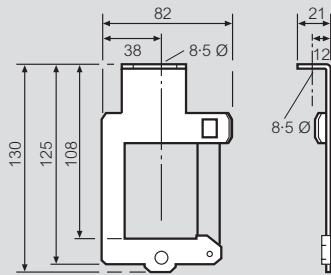


**End stop – left**

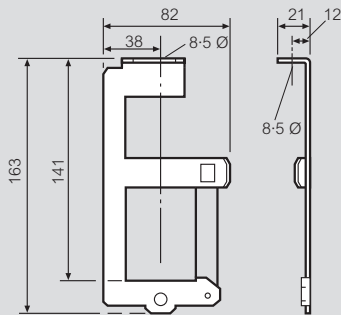




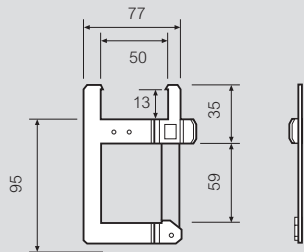
**Cat. No. EEA308 Suspended trunking fixing bracket**



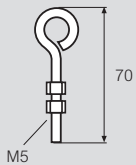
**Cat. No. EEA312 Suspended trunking fixing bracket cable duct stirrup**



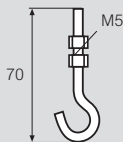
**Cat. No. EEC352 Cable duct fixing bracket**



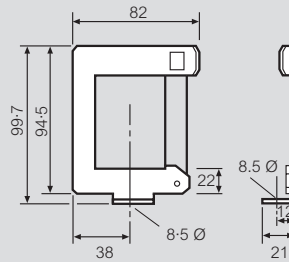
**Cat. No. EEB344 Closed ring hook**



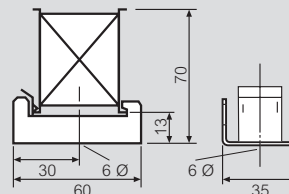
**Cat. No. EEB340 Open hook**



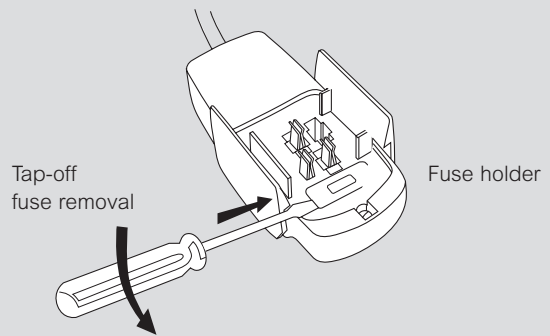
**Cat. No. EEA324 Luminaire suspended fixing bracket**



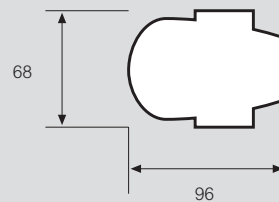
**Cat. No. EEA328 Luminaire 45 mm edge suspension fixing bracket**



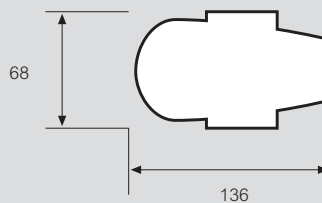
**Fused tap-off**



**Pre-wired tap-offs – 33 mm deep**



**Rewirable and phase selection tap-offs – 35 mm deep**



# Electrak® buscom trunking

## installation

### ■ Design and installation

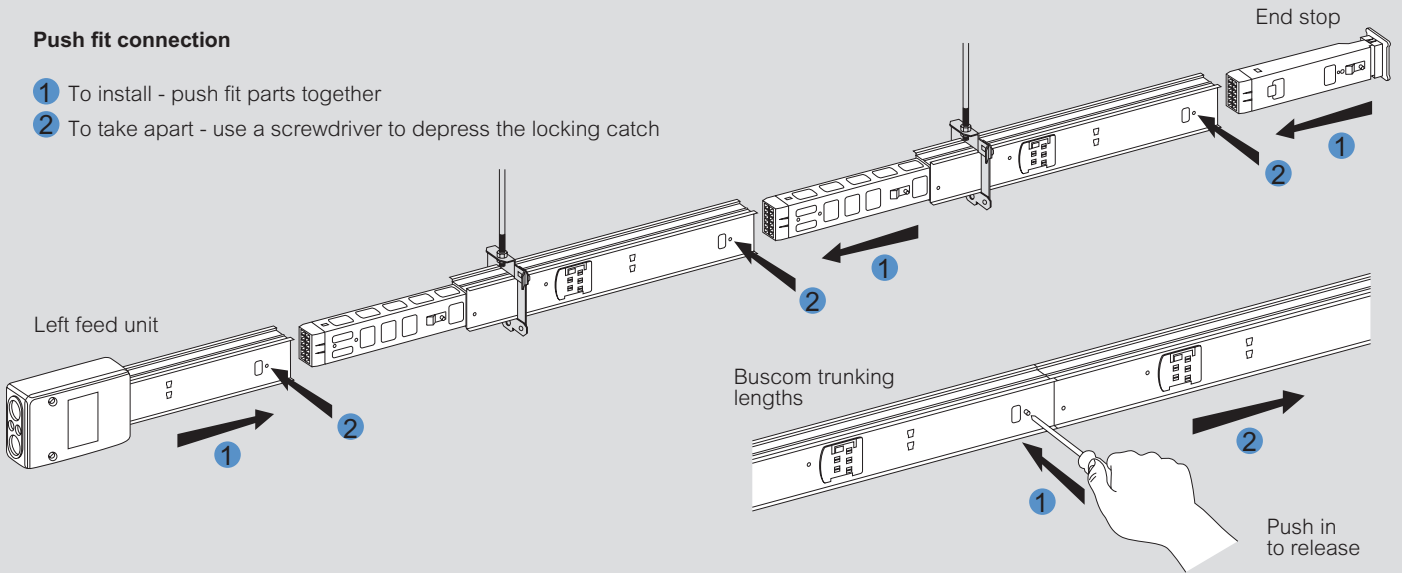
Electrak Buscom trunking system comprises continuous lengths of galvanised steel trunking available in 2 m and 3 m lengths with integral connectors and regular tap-off outlets

Each trunking run commences with a feed unit for electrical and comms bus cable termination. The connection between the trunking, the feed unit and subsequent trunking lengths is push fit and requires no tools to terminate the connection or ensure good earthing. Each complete track run is finished with an end stop

The trunking system is supplied with IP 4X ingress protection, fully factory tested and ASTA approved to BS EN 60439-2 : 2008 and is designed to meet the requirements of BS EN 61534-21 : 2014

#### Push fit connection

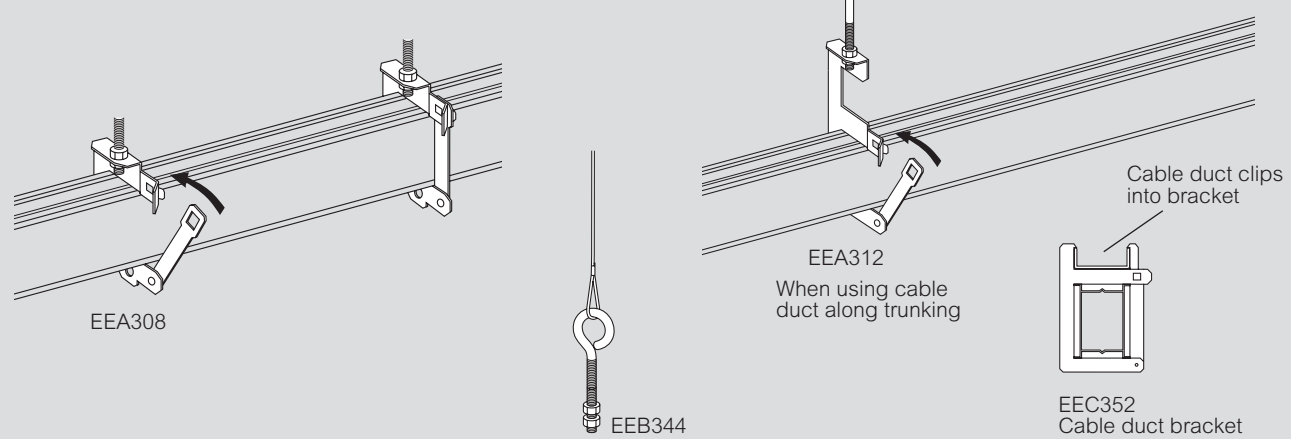
- 1 To install - push fit parts together
- 2 To take apart - use a screwdriver to depress the locking catch



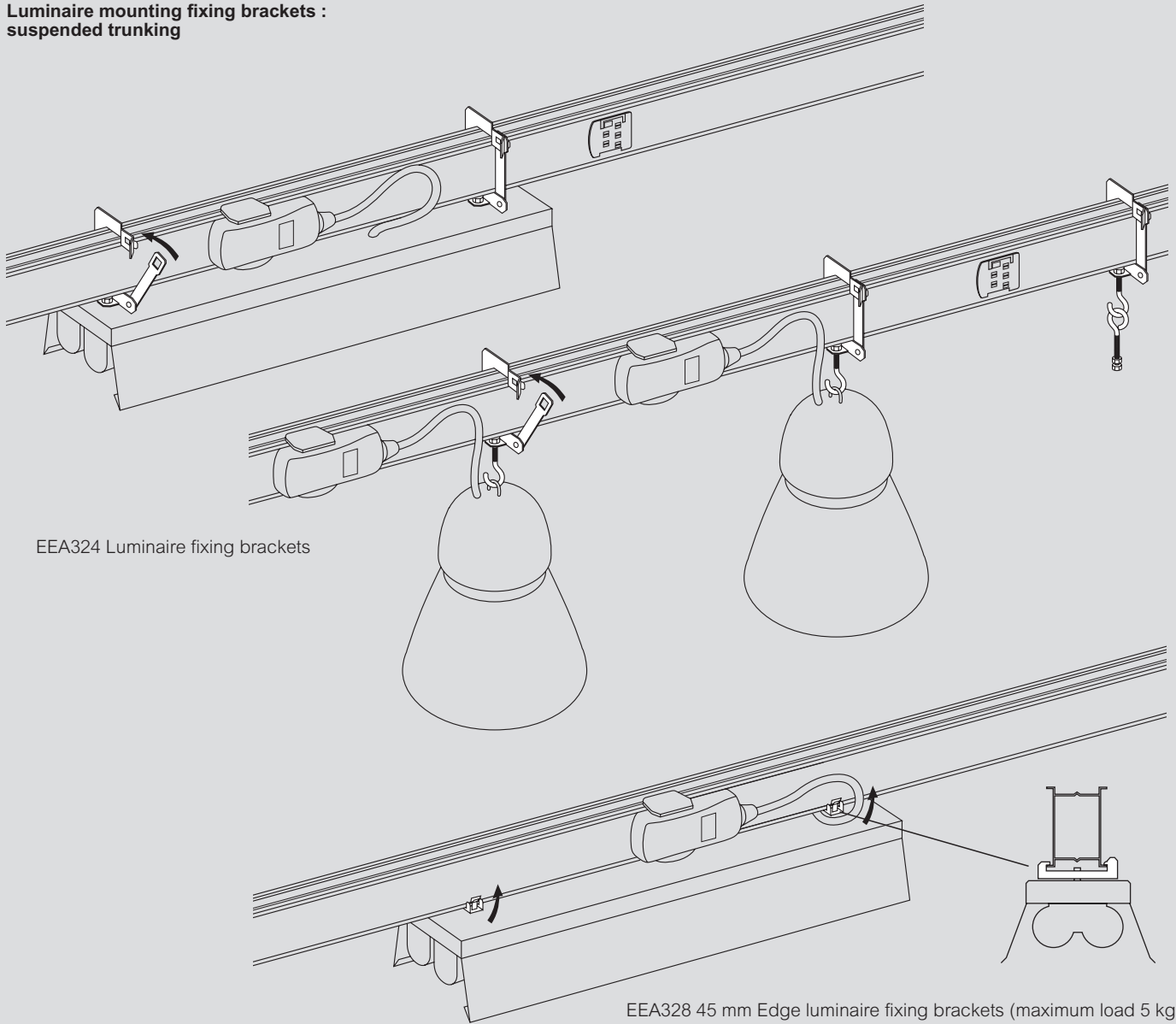
#### Considerations before installation

Calculate the distance between fixing brackets - the maximum fixing distance should not exceed 4 m. If loads are to be hung, please consult loading charts on page 39. The maximum buscom trunking weight is 2 kg/m. When fixing brackets to drop rods or surfaces, see mounting details below

#### Suspended trunking fixing brackets



**Luminaire mounting fixing brackets :  
suspended trunking**



EEA324 Luminaire fixing brackets

EEA328 45 mm Edge luminaire fixing brackets (maximum load 5 kg)

## CONTACT DETAILS

### Quotations and Technical Support:

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E-mail: powersales.uk@legrand.co.uk

### Customer Services:

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County Durham, DH8 6SR  
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E-mail: powersales.uk@legrand.co.uk

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