

EMDX³ multi-function measuring units

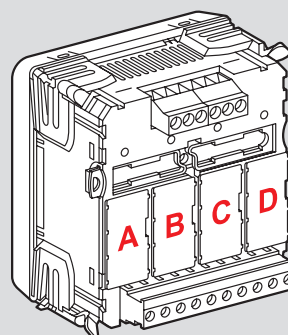
└ rail mounting and for mounting on door or solid faceplate

Technical characteristics

Cat. Nos.			4120 45	4120 47	4120 51	4120 52	4120 53	
Connection	Current measurement terminals	Flexible cable	4 mm ²	4 mm ²	4 mm ²	4 mm ²	4 mm ²	
		Rigid cable	6 mm ²	6 mm ²	6 mm ²	6 mm ²	6 mm ²	
	Other terminals	Flexible cable	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	
		Rigid cable	4 mm ²	4.5 mm ²	4 mm ²	4 mm ²	4 mm ²	
Protection index	Front cover	IP 54					IP 54	
	Casing	IP 20					IP 20	
Weight			250 g	285 g	250 g	285 g	285 g	
Display	Type	Backlit LCD					Backlit LCD	
	Refresh time	1.1 s		1.1 s	1 s	1 s	1 s	
Measurements			1P+N, 3P, 3P+N	1P+N, 3P, 3P+N	1P+N, 3P, 3P+N	1P+N, 3P, 3P+N	1P+N, 3P, 3P+N	
Voltage measurement	Direct	Phase/Phase	80 - 500 V	50 - 460 V	80 - 500 V	80 - 500 V	80 - 690 V	
		Phase/Neutral	50 - 290 V	86 - 260 V	50 - 290 V	50 - 290 V	50 - 400 V	
	From PT	Primary	-	-	max. 1200 V	max. 1200 V	max. 150 kV	
		Secondary	-	-	-	-	-	
Update period			0.8 s	0.3 s	0.2 s	0.2 s	0.2 s	
Current measurement	Direct			-	-	-	-	
		From a CT	Primary	50 kA	50 kA	max. 10 kA (X/1 A) or 50 kA (X/5A)	max. 10 kA (X/1 A) or 50 kA (X/5A)	max. 10 kA (X/1 A) or 50 kA (X/5A)
			Secondary	5 A	5 A	1 A or 5 A	1 A or 5 A	1 A or 5 A
	Minimum measurement			10 mA	10 mA	5 mA	5 mA	5 mA
	Input consumption			≤ 1 VA	≤ 1 VA	≤ 1 VA	≤ 1 VA	≤ 0.2 VA
	Permanent overload			1.2 In	1.2 In	1.2 In	1.2 In	1.2 In
	Intermittent overload			20 In / 0.5 s	20 In / 0.5 s	20 In / 0.5 s	20 In / 0.5 s	20 In / 0.5 s
	Update period			0.2s	0.2s	0.2s	0.2 s	0.2 s
Max. CT x PT ratio			9999	9999	99990	99990	10000000 (x/1 A) 2000000 (x/5 A)	
Power measurement	Total			0 - 9999 kW/ kVA / kVA	0 - 9999 kW/ kVA / kVA	0 - 9999 kW/ kVA / kVA 0 - 9999 MW I MVA	0 - 9999 kW/ kVA / kVA 0 - 9999 MW I MVA	0 - 9999 kW/ kVA / kVA 0 - 9999 MW I MVA
	Update period			0.2 s	0.2 s	0.2 s	0.2 s	0.2 s
Frequency measurement	Measurement range			45/65 Hz	45/65 Hz	45/65 Hz - 360/440 Hz	45/65 Hz - 360/440 Hz	45/65 Hz
	Update period			0.2 s	0.2 s	0.2 s	0.2 s	0.2 s
Auxiliary power supply	50 / 60 Hz			230 V ± 10%	Self-supplied	80 - 265 V ± 10%	80 - 265 V ± 10%	80 - 265 V ± 10%
	d.c.			-	-	100 - 300 V ± 10%	100 - 300 V ± 10%	100 - 300 V ± 10%
	Consumption	a.c.			≤ 2.5 VA	≤ 2.5 VA	≤ 2.5 VA	≤ 2.5 VA
		d.c.			-	≤ 2.5 W	≤ 3.5 W	≤ 3.5 W
Operating temperature			from -5° C to +55° C	from -5° C to +55° C	from -5° C to +55° C	from -5° C to +55° C	from -5° C to +55° C	
Storage temperature			from -25° C to +70° C	from -25° C to +70° C	from -25° C to +70° C	from -25° C to +70° C	from -25° C to +70° C	

Maximum number of modules and installing position for multi-function measuring unit Cat. No. 4120 53 (see p. 15)

Cat. Nos.	Designation	Max. number	EMDX ³ -Premium 4120 53
4120 55	RS 485 communication module	1	A
4120 57	2 inputs / 2 outputs module	2	C, D
4120 58	Temperature module	1	D
4120 59	Pulse output module for energy count	2	A, B, C, D
4120 60	2 analog outputs module	2	C, D



Fitting modules Cat. No. 4120 53 (see p. 15)

