DRB ENERGY-METERS THREE-PHASE - BASIC CT 5A/80A

Features

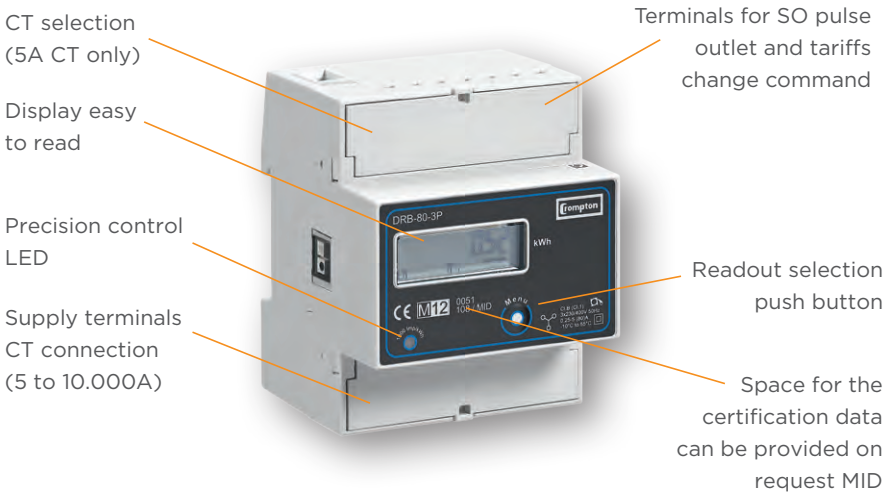
- For direct connection 80A, or for transformer .../5A
- For transformer primary current of 5A to 10.000/5A. Input is in 5A increments
- 9 digits - 4 display for energy values indication
- Detection of connection errors (phase transposition and phase missing)
- Accuracy class 1 for active energy according to EN 50470-3 (B)
- Operating range current (Ist ... Imax) for direct connection 80A = 0.015 ... 80A for connection by CT .../5A = 0.003 ... 5A
- Energy register for import and export
- Sealable terminal covers
- 4 DIN modules wide (72mm)

- Direct connection 80A
- Connection through CT .../5A upto 10.000/5A

Digital active energy-meter for imported and exported energy - 2 tariffs - 2 SO.

A three-phase active energy meter with a 9 digit, 2 decimal, display showing the total active energy reading. The meters have 2 SO outputs generating pulses for remote processing of active and reactive energy and 2 tariffs.

4 standard module housing, suitable for DIN-rail mounting Connection through CT .../5A upto 10.000/5A or direct connection upto 80A



Technical Data

Display			DRB - 80 - 3P direct connection 80A	DRB - 5 - 3P CT connection up to 10,000/5A
Supply Certified voltage range Un		V AC	230	230
Operating voltage range		V AC	184 ... 276	184 ... 276
Certified frequency fn		Hz	50	50
Operating frequency range		Hz	44 ... 66	44 ... 66
Rated power dissipation (max.) Pv		VA (W)	≤8 (0.6)	≤8 (0.6)
Overload capability Voltage Un	continuous; phase/ phase			
	1 second: phase/phase	V AC	800	800
	continuous; phase/N	V AC	276	276
	1 second: phase/N	V AC	300	300
Current Imax	continuous	A	80	6
	momentary (0.5 s)	A	-	120
	momentary (10 ms)	A	2400	-
Display (readouts) Connection errors and phase out discernible from phase-sequence indic.		-	PHASE Err	PHASE Err
Display type	LCD	n° digits	9 (2 decimal)	9 (2 decimal)
	digit dimensions	mm x mm	6.00 x 3	6.00 x 3
Active energy: 1 display, 9 digit - 2 tariffs	min. measuring energy	kWh	0.01	0.01
+ display import or export (arrow)	max. measuring overflow	kWh	9999999.99	9999999.99
Instantaneous tariff measurement	1 display, 1-digit	-	T1 or T2	T1 or T2
Transformer primary current		A	-	5 ... 10.000
Display period refresh		s	1	1

Technical Data

Display			DRB - 80 - 3P direct connection 80A	DRB - 5 - 3P CT connection up to 10,000/5A
Measuring accuracy Active energy	acc.to EN 50470-3	class 1	B	B
Measuring input Type of connection			direct	transformer .../5A
Operating range voltage	phase/phase	V AC	319 ... 480	319 ... 480
	phase/N	V AC	184 ... 276	184 ... 276
Current Iref		A	5	-
Current In		A	-	5
Current Imin		A	0.25	0.05
Operating range current (Ist ... Imax)	direct connection	A	0.015 ... 80	-
	transformer connection (CT)	A	-	0.003 ... 6
Transformer current	primary current of the transformer	A	-	5 ...10.000
	smallest input step adjus. in 5A steps	A	-	5
Frequency		Hz	49 ... 51	48 ... 62
Operating frequency		Hz	44 ... 66	44 ... 66
Differential		%	1	1
Pulse output SO Pulse output	acc.to EN 62053-3 for active energy T1 and T2	-	yes	yes
Quantity pulse output	for direct connection 80A	Imp/kWh	500	-
	depending on the transf. factor.	Imp/kWh	-	100-10-1
Pulse duration ms 30 or 50 32		ms	30 ±2	30 ±2
Required voltage	min. (max.)	V AC (DC)	5 ... 230 ±5% (5 ... 300)	5 ... 230 ±5% (5 ... 300)
Safety acc. to EN 50470-1 Degree of pollution		-	2	2
Operational voltage		V AC	300	300
AC voltage test (EN 50470-3, 7.2)		kV	4	4
Impulse voltage test		1.2/50 µs-kV	6	6
Protection class (EN 50470)		class	II	II
Housing material flame resistance	UL 94	class	V0	V0
Environmental conditions Operating temperature (on request -25 ... +55 °C)		°C	-10 ... +55	-10 ... +55
Limit temperature of transportation and storage		°C	-25 ... +70	-25 ... +70
Relative humidity (not condensation)		%	≤80	≤80
Degree protection	housing when mounted in front (term.)	-	IP51(*)/IP20	IP51(*)/IP20

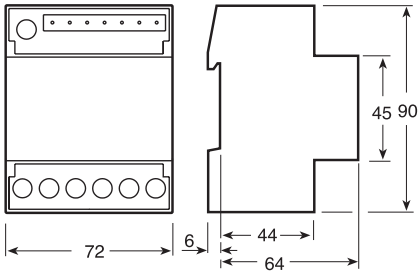
(*) For the installation in a cabinet at least with IP51 protection.

Product Codes

Description	Comm	DIN mod.	Part number
LCD kWh .../5A, 2 tariffs, 2S0	pulse	4	DRB-5-3P
LCD kWh 80A, 2 tariffs, 2S0	pulse	4	DRB-80-3P

Dimensions

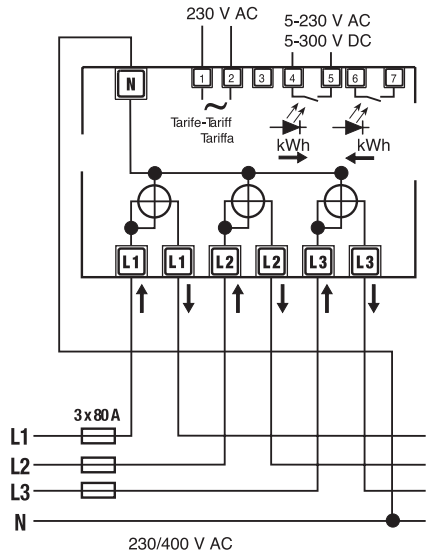
DRB-80-3P

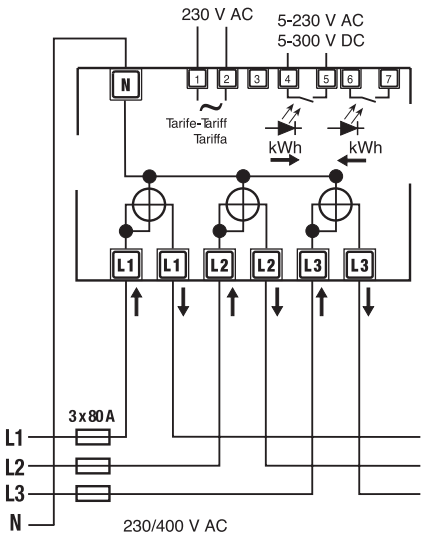


An 80A fuse is recommended for the line protection.

Circuit diagrams

DRB-80-3P

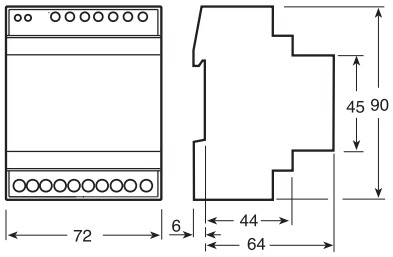




Wire N needs to be connected to the meter

Dimensions

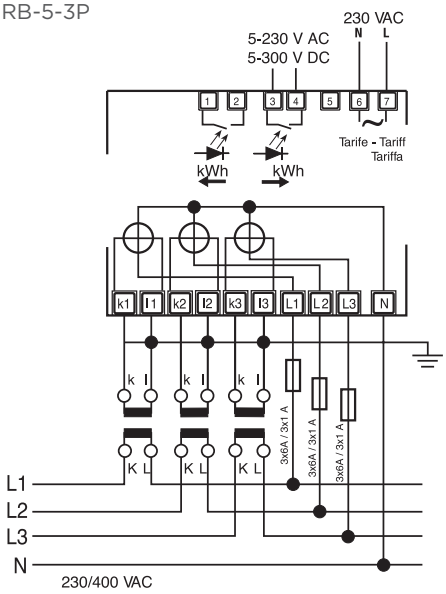
DRB-5-3P

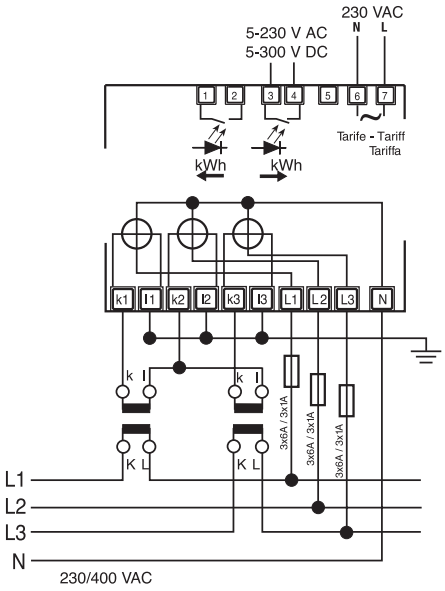


A 6A fuse is recommended for the line protection. Current transformers must not be operated with open terminals as dangerous high voltages might occur and may result in personal injuries and property damage. Transformers are exposed to thermal overload.

Circuit diagrams

DRB-5-3P





Wire N needs to be connected to the meter