



Auxiliary supply

Rated auxiliary supply voltage U_s
AC

	min	VAC	100
	Max	VAC	440
Auxiliary operating range			90...484VAC
Auxiliary rated frequency		Hz	50/60 $\pm 10\%$
Power consumption Max		VA	9.5
Power dissipation Max		W	3.5
Immunity time for microbreakings		ms	<25

Voltage inputs

Rated voltage (U_e)	VAC	600VAC L-L (rated max)
Operating range		50...720VAC L-L (415VAC L-N)
Frequency range	Hz	45...65
Type of measure		True RMS value
No-voltage release	ms	≥ 8
Measurement input impedance	k Ω	>1.10M Ω L-L, >0.55M Ω L-N
Type of connection		Single phase, two phase, three phase with or without neutral or balanced three phase system

Current inputs

Number of current input	Nr.	1
Type of input		Shunt supplied by external current transformer (low voltage). Max 5A
Measurement range		0.025...6A~ for 5A scale; 0.025...1.2A~ for 1A scale
Measurement method		True RMS value
Constant overload	I _e	1.2 I _e
Overload peak	A	50A for 1s
Burden per phase	W	<0.6VA

Measurement data

Type of voltage and current measurement		True RMS value
Power factor adjustment		0.5ind...0.5cap.
Type of temperature sensor		Internal
Temperature measurement range	$^{\circ}\text{C}$	0...+212

Relay outputs

Number of relay output	Nr.	5 (up to 8 with EXP10 06 - EXP10 07)
Contact arrangement		4 NO-SPST + 1 C/O-SPDT
Rated current		5A 250V AC1
UL/CSA and IEC/EN 60947-5-1 designation		B300
Maximum current at common contact terminal	A	10
Maximum switching voltage	VAC	415
Electrical life (with rated load)	cycles	10 ⁵
Mechanical life	cycles	10 ⁷

Insulations

Rated insulation voltage Ui IEC/EN	V	600
Rated impulse withstand voltage Uimp	kV	9.5
Operating frequency withstand voltage	kV	5.2

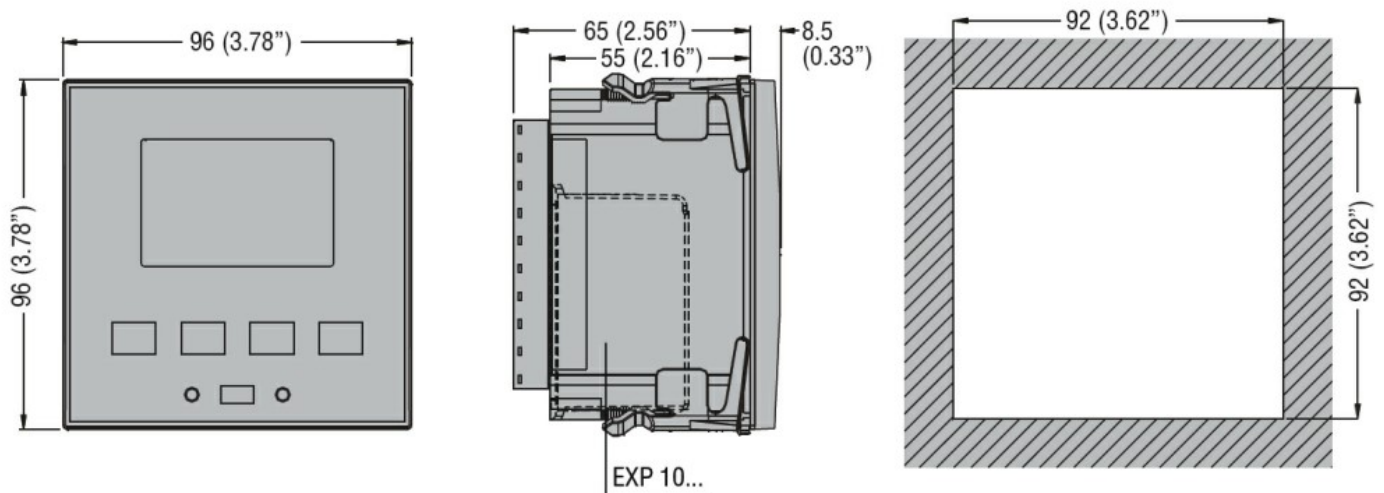
Functions

Automatic recognition of current flow direction	Yes
4-quadrant operation	Yes
Master-Slave function	No
Independent auxiliary supply input	Yes
Three-phase voltage control	No
Current inputs	1
Dynamic (FAST) power factor correction	No
Power factor correction by single phase	No
Possibility of connecting inductive steps	No
Possibility of use in medium voltage	Yes
Possibility of phase-neutral insertion on a three-phase system	Yes
Analog outputs	No
Input programmable as function or external temperature sensor	No
USB communication interface	No
RS232 communication interface	Yes
Opto-isolated RS485 communication interface	Yes
Ethernet communication interface	Yes
Opto-isolated Profibus-DP interface	No
GPRS/GSM modem	No
Optical port on front for the connection of USB devices	Yes
Optical port on front for the connection of Wi-Fi devices	Yes
Fast setting of current transformer	Yes
Compatible with Xpress configuration and remote control software	Yes
Compatible with Synergy and Synergy Cloud, supervision and energy management software	Yes
Compatible with Sam1 App	Yes
Calendar-clock with backup reserve power	No
Data logging memory	No
Event logging: alarms, setup changes, etc.	No
Customisable internal counters	No

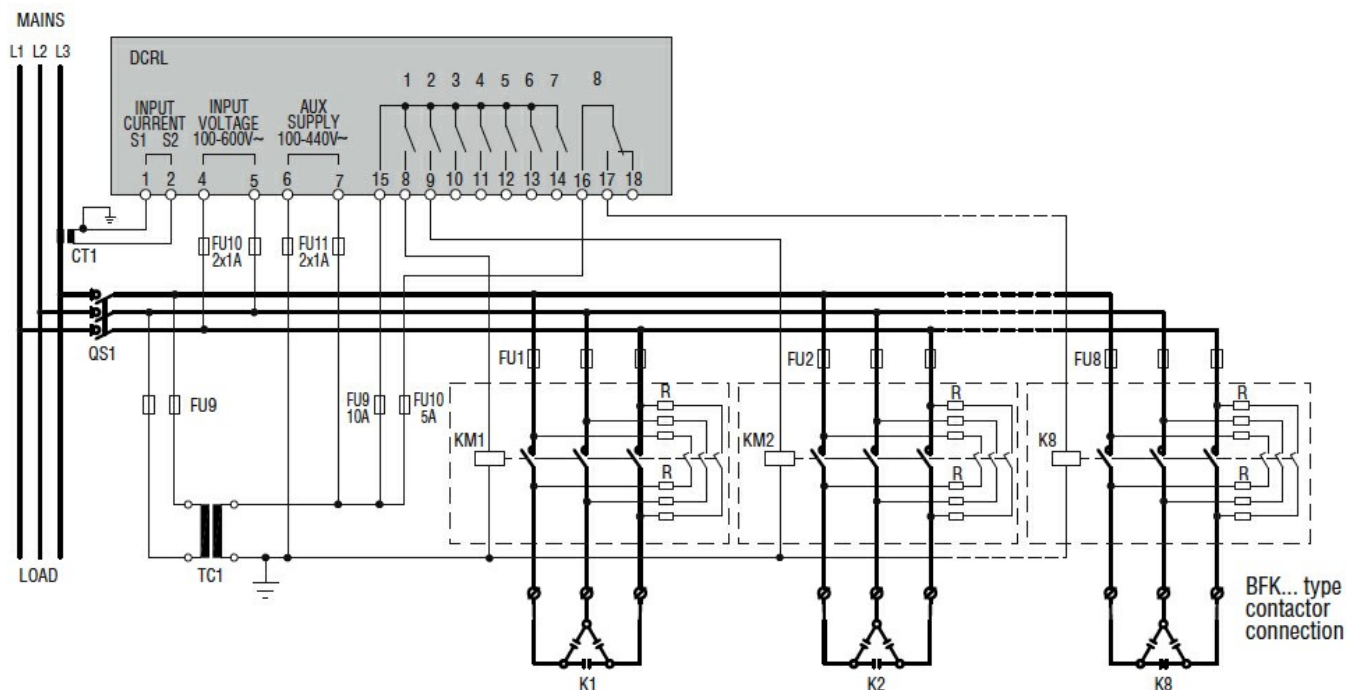
Connections

Type of terminal		Plug-in, removable
Conductor cross section	min	mm ² 0.2
	Max	mm ² 2.5

		min	AWG	24AWG (18AWG according to UL/CSA)
		Max	AWG	12
Tightening torque (Max)				
			Nm	0.56
			lbin	5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-20
		max	°C	+60
	Storage temperature			
		min	°C	-30
		max	°C	+80
Relative humidity			%	<80%
Maximum Pollution degree				2
Overvoltage category				3
Measurement category				III
Climatic sequence				Z/ABDM (IEC/EN 60068-2-61)
Shock resistance				15g (IEC/EN 60068-2-27)
Vibration resistance				0.7g (IEC/EN 60068-2-6)
Housing				
Execution				Flush mount
Material				Polycarbonate
Mounting				Flush-mount 96x96mm (3.78x3.78")
Degree of protection				IP54 on front with gasket, if mounted in class IP54 panel or better. IP20 terminals
Dimensions (W x H x D)			mm	96 x 96 x 73.5
Weight			g	340
Dimensions				



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n°14
IEC/EN 61000-6-2
IEC/EN 61000-6-4
IEC/EN 61010-1
IEC/EN 61010-2-030
UL 508

Certificates

cULus
EAC
RCM

ETIM classification

ETIM 8.0

EC001443 -
Effective power
(cos phi)
monitoring relay