



Automatic power factor controller, 5 steps, icon display
DCRL5

Product designation

Product type designation

Auxiliary supply

Rated auxiliary supply voltage U_s
AC

min	VAC	100
Max	VAC	440

DC

min	VDC	110
Max	VDC	250

Auxiliary operating range		90...484VAC / 93.5...300VDC
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

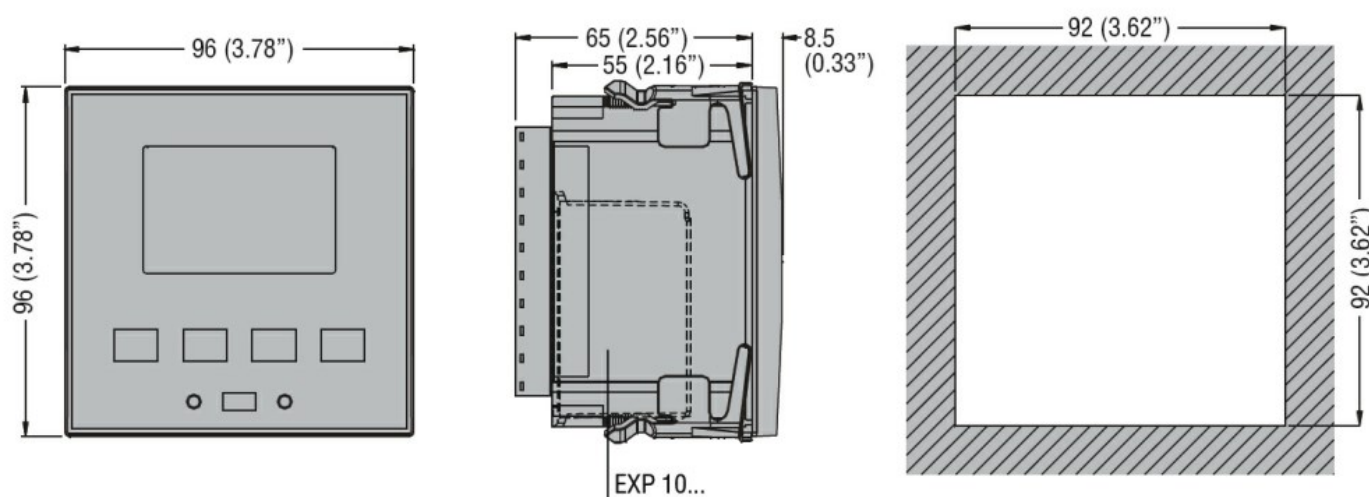
Current inputs

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

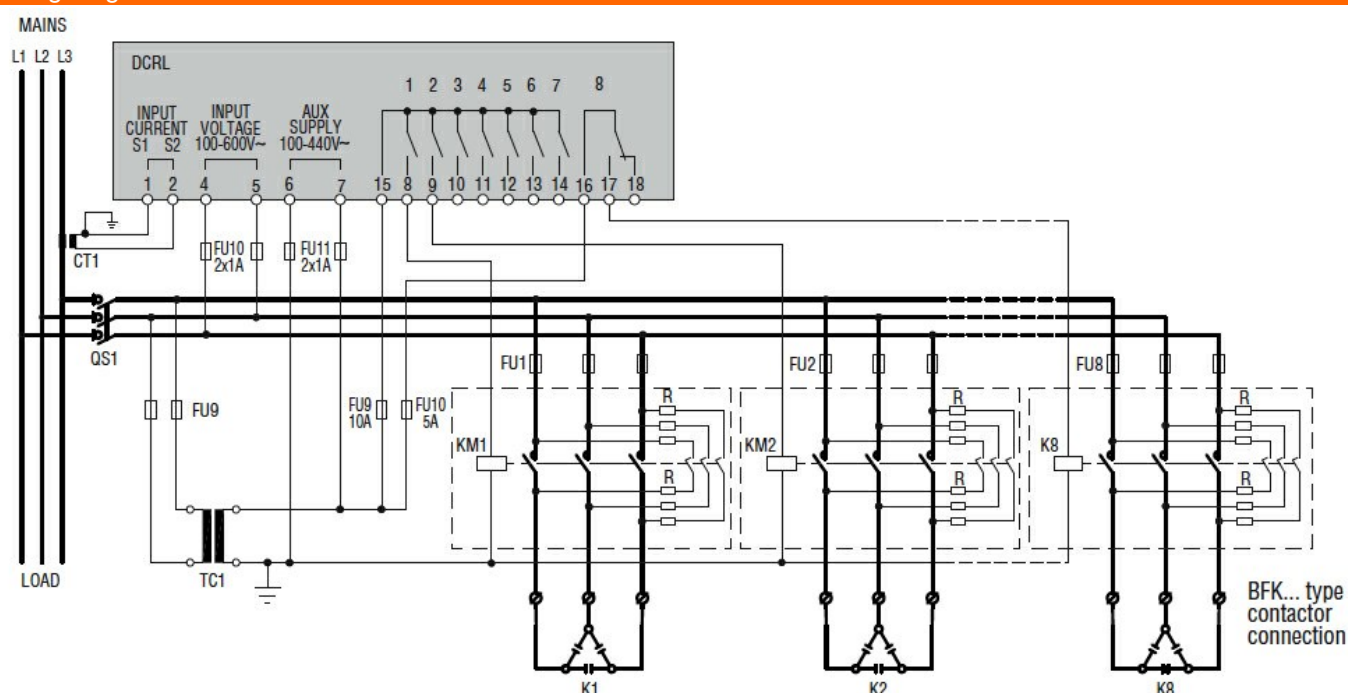
Constant overload	le	1.2 le
Overload peak	A	50A for 1s
Burden per phase	W	<0.6VA
Measurement data		
Type of voltage and current measurement		True RMS value
Power factor adjustment		0.5ind...0.5cap.
Type of temperature sensor		Internal
Temperature measurement range	°C	0...+212
Relay outputs		
Number of 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	105
Mechanical life	cycles	107
Insulations		
Rated insulation voltage Ui IEC/EN	V	600
Rated impulse withstand voltage Uimp	kV	9.5
Operating frequency withstand voltage	kV	5.2
Connections		
Type of terminal		Plug-in, removable
Conductor cross section	min mm ² Max mm ² min AWG Max AWG	0.2 2.5 24AWG (18AWG according to UL/CSA) 12
Tightening torque (Max)	Nm lbin	0.56 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")
	IP54 on front with gasket, if mounted in class IP54 panel or better. IP20 terminals
Degree of protection	
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