



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 \geq 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

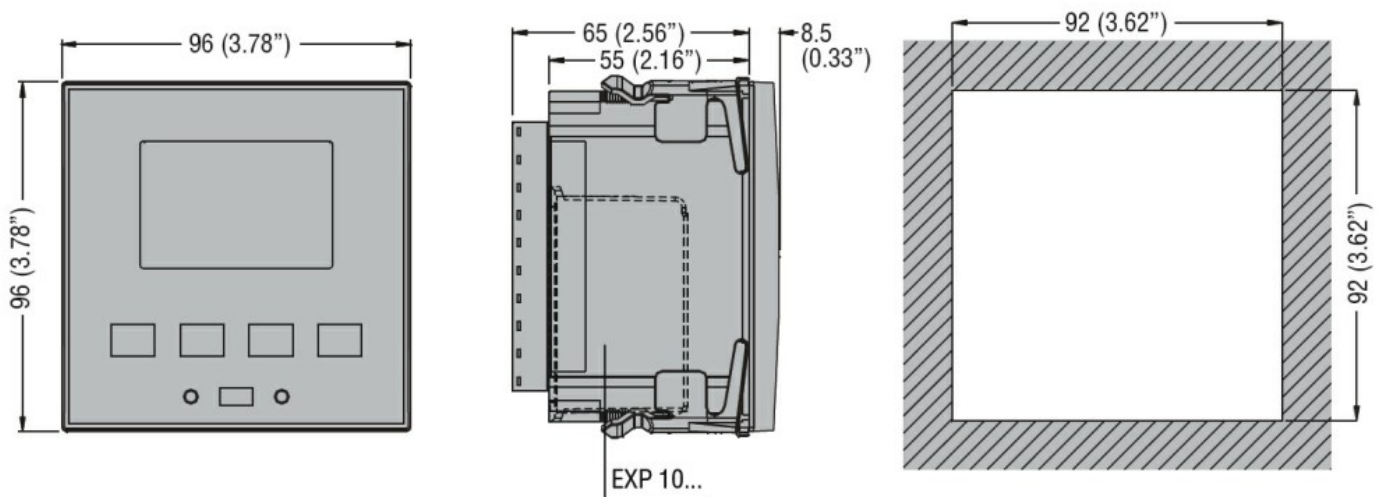
Measurement method

True RMS value

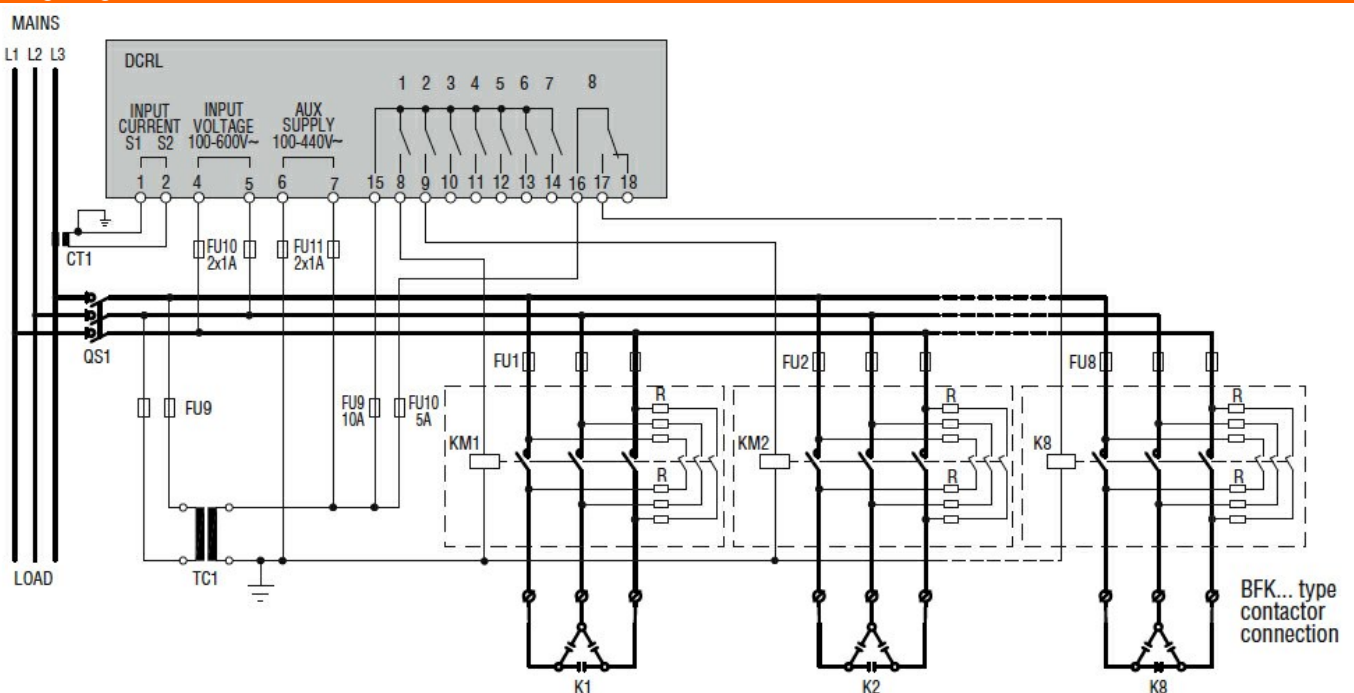
Constant overload		le	1.2 le
Overload peak		A	50A for 1s
Burden per phase		W	<0.6VA
Measurement data			
Type of voltage and current measurement			True RMS value
Power factor adjustment			0.5ind...0.5cap.
Type of temperature sensor			Internal
Temperature measurement range		°C	0...+212
Relay outputs			
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	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
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	
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