

Product designation	Automatic power factor controller, 8 steps, icon display		
Product type designation	DCRL8		
<b>Auxiliary supply</b>			
Rated auxiliary supply voltage Us			
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 ±10%
Power consumption Max		VA	8.5
Power dissipation Max		W	3
Immunity time for microbreakings		ms	<25
<b>Voltage inputs</b>			
Rated voltage (Ue)		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		kΩ	>15MΩ
Type of connection			Single phase, two phase, three phase with or without neutral or balanced three phase system
<b>Current inputs</b>			
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		Ie	1.2 Ie
Overload peak		A	50A for 1s
Burden per phase		W	<0.6VA
<b>Measurement data</b>			
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.	8 (up to 14 with EXP10 06 - EXP10 07)
Contact arrangement		7 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 $U_i$ IEC/EN	V	600
Rated impulse withstand voltage $U_{imp}$	kV	9.5
Operating frequency withstand voltage	kV	5.2

### Connections

Type of terminal		Plug-in, removable
Conductor cross section	min	mm <sup>2</sup> 0.2
	Max	mm <sup>2</sup> 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 144x144mm (5.67x5.67")

Degree of protection		IP65 on front with gasket, if mounted in class IP65 panel or better. IP20 terminals
Dimensions (W x H x D)	mm	144 x 144 x 53.2
Weight	g	640
<b>Dimensions</b>		
<b>Wiring diagrams</b>		
<b>Certifications and compliance</b>		
Compliance		CSA C22.2-N°14 IEC/EN 61000-6-2 IEC/EN 61000-6-3 IEC/EN 61010-1 IEC/EN 61010-2-030 UL508
Certificates		cULus EAC RCM
<b>ETIM classification</b>		
ETIM 8.0		EC001443 - Effective power (cos phi) monitoring relay