# Automatic power factor controllers and thyristor modules **Automatic power factor controllers**

### **DCRL** series







DCRL 3 - DCRL 5



**EXP80 00** 



EXP 10...

Order code	Steps	housing size	Qty per pkg	VVt
	n°	[mm/in]	n°	[kg]
Single and three-phase low and medium-voltage systems				
DCRL 3	3	96x96/3.8x3.8	1	0.300
DCRL 5	5	96x96/3.8x3.8	1	0.350
Accessory.				
EXP80 00	Plastic insert for fixing		10	0.050

Snap in fixing o	EXPANSION MODULES Snap in fixing of only one module on DCRL rear. Inputs and outputs.				
EXP10 06	2 relay outputs to increase number of capacitor steps				
EXP10 03	2 relay outputs rated 5A 250VAC				
Communication	n ports.				
EXP10 10	10 10 Opto-isolated USB interface				
EXP10 11	10 11 Opto-isolated RS232 interface				
EXP10 12	Opto-isolated RS485 interface				

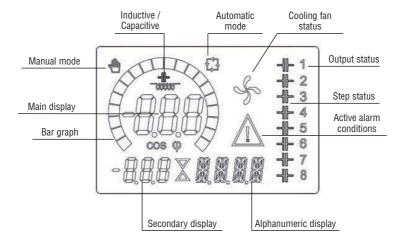
Description

EXP... expansion module fixing DCRL 3 - DCRL 5

Order code



### Backlight icon LDC screen



#### **General characteristics**

DCRL series has been developed with advanced functionality and made with a dedicated ultra compact housing. It combines modern front design with mounting and expandability ease. The LCD screen provides a clear and intuitive user interface.

Main features include:

- Backlight icon LCD with excellent information viewing
   Alarm codes with scralling tests.
- Alarm codes with scrolling tests, programmable in 6 languages (Italian, English, Spanish, French, German and Portuguese)
- Connection in single or three phase lines and co-generation systems with 4-quadrant operation
- Independent voltage measurement input which can be used in medium-voltage lines with VTs
- Extreme reduction of the number of switching operations
- Balanced use of steps with same power rating
- Reactive power measurement per step installed
- Capacitor over-current protection
- Panel over-temperature protection by internal sensor
- Accurate no-voltage release protection
- Extensive choice of available measurements, including voltage and current THD with single harmonic analysis up to 15° order.
- Wide voltage measurement range
- High accuracy measurement (TRMS)
  Front optical USB (with CX01 dongle) or Wi-Fi (with CX02 dongle) communication port for PC, smartphone and tablet connection
- DCRJ SW setup software
- Compatible with Synergy supervision software
   Front label customising facility.
- Front label customising facility.

### **Operational characteristics**

- Voltage circuit:
- Auxiliary supply: 100-440VAC
- Frequency: 50/60Hz ±10%
- Voltage input:
- Rated voltage: 600VAC L-L (346VAC L-N)
  Frequency range: 45-65Hz
- Current input:
- Single phase connection
- · Rated current: 1A or 5A configurable
- Measurement and control
  - Power factor adjustment: 0.5 ind to 0.5 cap
  - Voltage measurement range: 50-720VAC L-L; 50-415VAC L-N
  - Current measurement range: 0.025-1.2A for 1A full scale; 0.025-6A for 5A full scale
  - Type of voltage and current measurement: TRMS
- Relay outputs (steps)
- DCRL3: 3 outputs DCRL5: 5 outputs
- Output arrangement: Normally Open (NO / SPST) contact; except the last being a changeover (SPDT)
   Rated capacity: 5A 250VAC (UL/CSA B300 general
- Flush-mount housing: 96x96mm/3.8x3.8"
- IEC degree of protection: IP54 on front; IP20 at terminals.

## Certifications and compliance:

Certifications obtained: EAC; UL Listing for USA and Canada (cULus - File E93601), as Auxiliary Devices -Power factor controllers.

Compliant with standards: IEC/EN 61010-1 IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL508, CSA C22.2 n°14.

Contactors for power factor correction See Section 2, page 14.

ynergy supervision software See Section 27.

**EXP** series expansion modules See Section 28, page 2.