



Reactive current controller DCRM 2



moduLo

Lovato
electric
100% electricity

Reactive current controller



moduLo

DCRM 2

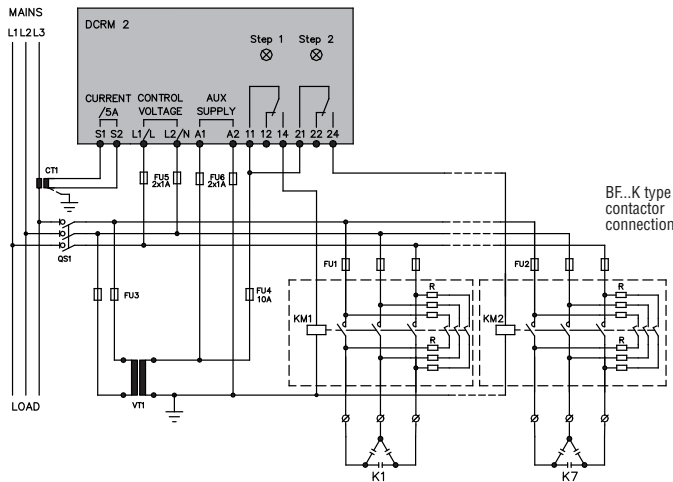
Order code	Steps	Auxiliary supply voltage	Qty per pkg	Weight
	n°	[V]	n°	[kg]

Single and three-phase low-voltage system.
Reactive current monitoring relay.

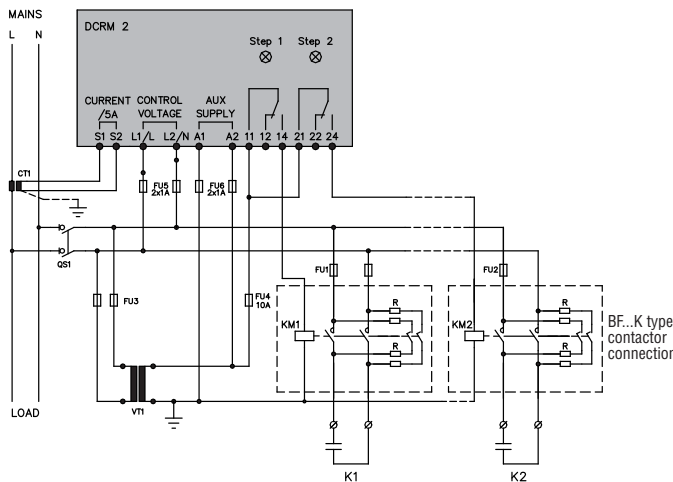


DCRM 2	2	380-415VAC	1	0.166
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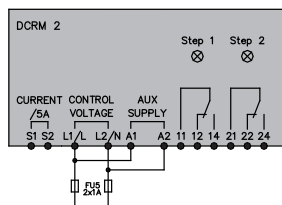
Three-phase connection



Single-phase connection



Option with common supply voltage / measuring voltage



General characteristics

The DCRM 2 allows to control the reactive current of a plant, eliminating it from the total current drawn from the mains and correcting the cos-phi of the load to the best possible value.

It can control the connection of maximum 2 banks of capacitors. Each one of the two capacitor banks can be individually enabled and its power can be set through a dedicated trimmer.

It is also possible to adjust the time for connection and disconnection of the capacitors, modifying the reaction speed of the system.

The device can be used both in single-phase and three-phase wiring.

Operational characteristics

- Auxiliary supply voltage: 380-415VAC standard
- Operating frequency: 50/60Hz
- Voltage input: 80-480VAC +10%
- Current input:
 - Through CT /5A
- Current operating range: 0.1-6A
- TRMS measurements
- 2 relay outputs, each with one changeover contact, rated 8A 250VAC in AC1
- Modular DIN 43880 housing (3 module)
- Degree of protection: IP40 on front (only when mounted in housing or electric board with IP40); IP20 on terminals.

ADJUSTMENTS

- "C/K Step 1" C/K ratio step 1 (0.15-2)
- "C/K Step 2" C/K ratio step 2 (0.15-2)
- "Connection delay" Tripping time 1-60s
- "Disconnection delay" Resetting time 0.1-60s
- "System configuration" Single or three-phase system.

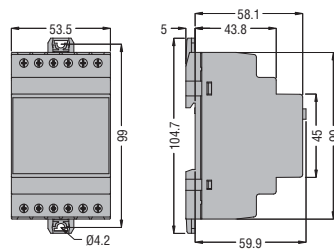
STATUS INDICATIONS

- 1 green LED for power ON
- 2 red LEDs for banks connected.

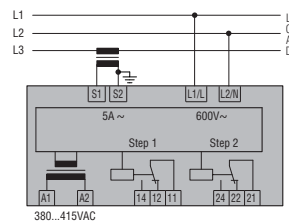
Certifications and compliance

Certifications obtained: cULus.
Compliant with standards: IEC/EN 60255-5, IEC/EN 61010-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL 508, CSA C22.2 n°14.

Dimensions [mm]



Wiring diagrams



Technical characteristics

AUXILIARY SUPPLY CIRCUIT	
Rated auxiliary voltage (Us)	380-415VAC
Operating range	0.85-1.15 Us
Operating frequency	50/60Hz ±5%
Power consumption/dissipation max	4.4VA / 2.4W
Micro-breaking immunity	≤ 17ms
No-voltage release	≥ 8ms
VOLTAGE INPUT	
Maximum rated voltage Ue	480VAC
Measuring range	80-528VAC
Frequency range	50 o 60Hz ±1% self configurable
Measuring input impedance	>1MΩ
Wiring mode	L1-L2 or L-N
CURRENT INPUT	
Type of connection	through current transformer (CT)
Rated current Ie	5A~
Measuring range	0.1...6A
Type of input	Shunt supplied by an external current transformer (low voltage). Max. 5A
Measuring method	True RMS value
Overload capacity	+20% Ie
Overload peak	10In for 1s
Dynamic limit	160A for 10ms
Burden	≤ 0.6W
ADJUSTMENTS	
C/K step 1 and 2	OFF / 0.15 - 2
Connection delay / Disconnection delay	1 – 60s
System configuration	3ph – 1ph
RELAY OUTPUTS	
Number of relays	2 (1 changeover each)
Rated operational voltage	250VAC
Maximum switching voltage	400VAC
Conventional free air thermal current (Ith)	8A
Designation per IEC/EN 60947-5-1	B300
Electrical life (with rated load)	10 ⁵ cycles
Mechanical life	30x10 ⁶ cycles
CONNECTIONS	
Maximum tightening torque	0.8Nm (7 lbin)
Conductor cross section min...max	0.2...4.0mm ² (24...12AWG)
INSULATION (input-output)	
Rated insulation voltage	480VAC
AMBIENT CONDITIONS	
Operating temperature	-20...+60°C
Storage temperature	-30...+80°C
HOUSING	
Material	Self-extinguishing polyamide



2011



Fuse holders



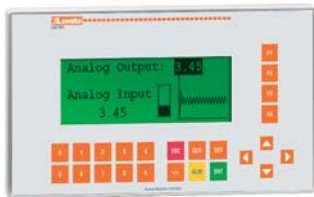
DC fuses 10x38



Flush mount digital multimeters and power analyzers



Energy meters



HMI operator panel

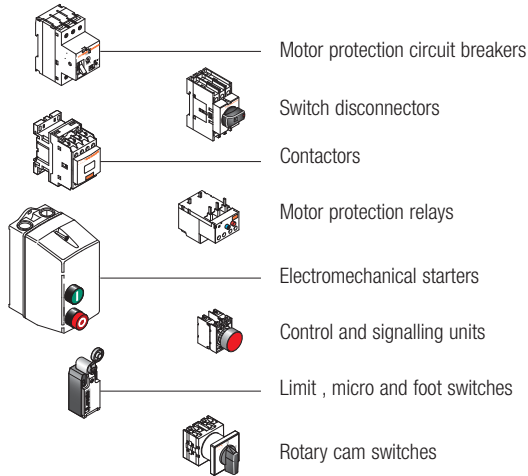


Switching battery chargers

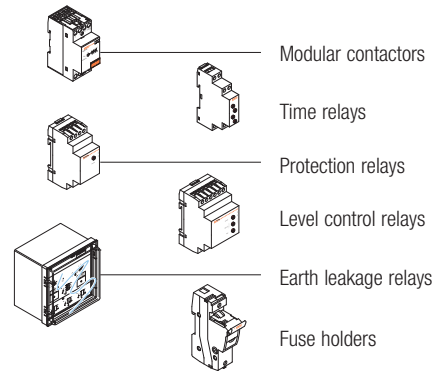


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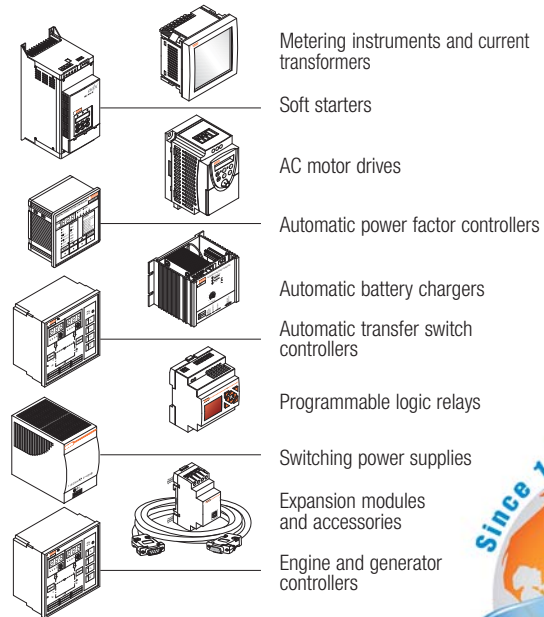
Planet Switch



Planet Din



Planet Logic



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