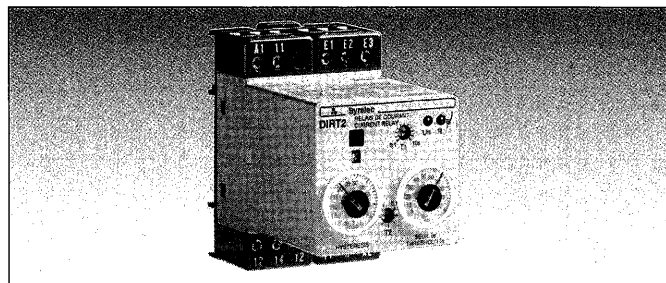


- Controls AC and DC currents
- 5 mA to 10 A RMS measurement range
- Normal or reverse relay selection by switch on front panel
- Normal or reverse relay selection by switch on front panel
- Normal or reverse relay selection by switch on front panel
- Delay on upward crossing of the threshold can be set at 0.1 to 10 s on front panel : T₁
- Time-out of high threshold overrun adjustable from 0.1 to 3 seconds via front panel : T₂



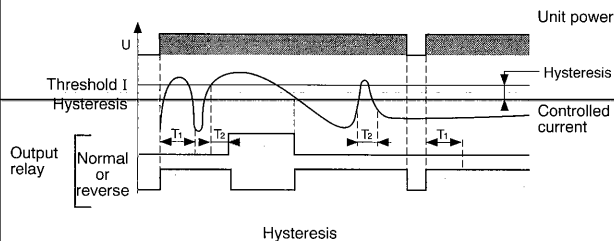
Operating principle

1 - Control of AC/DC current WITHOUT latching

When the value of the AC or DC current being controlled reaches threshold (I_e) displayed on the front panel, the output relay changes status, at the end of timing T₂, on upward crossing of the threshold (adjustable between 0.1 and 3 seconds via front panel).

The relay immediately returns to its initial status when the current drops to below 5 to 50% of the threshold (hysteresis) or if the power supply is cut.

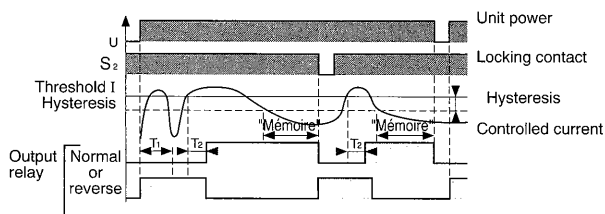
Changing the hysteresis value (via front panel) does not change the value of the preset threshold.



2 - Current control WITH fault storage : (Terminals Y1 - M or 9 - 8 connected)

When the value of the current being controlled reaches the threshold displayed, the output relay changes status, at the end of T₂, and remains locked in this position.

To reset the relay contact S₂, between Y1 and M (9 and 8), must be opened or the power supply to the unit must be cut.



Note :

The power-up time-out T₁ (adjustable between 0.1 and 10 seconds via front panel) inhibits current peaks caused by motor start-up.

The delay on high threshold overrun T₂ (adjustable between 0.1 and 3 seconds via front panel) provides protection against power-line disturbance and other interference that can cause spurious triggering of the output relay.

To control a DC current, connect a link across terminals Y2 and M (11 - 8) Connections Y1-M (9 and 8) and Y0-M (11 and 8) should be as short as possible (less than 1 metre).

Type

DIN rail or panel mounting	DIRT2	
11-pin plug-in	LIRT2	
Part numbers (and voltages)		
24 V ~	84 893 212	84 893 222
24 V ~	84 893 213	84 893 223
48 V ~	84 893 215	84 893 225
110 V ~	84 893 216	84 893 226
230 V ~	84 893 217	84 893 227

Technical specification

Supply voltage	Galvanic isolation by transformer	230V , 110 V , 48 V , 24 V ~ 50/60 Hz
Un	No galvanic isolation (1)	24 V =

(1) In this case, the "negative" poles of the auxiliary power supply (terminal A2 or 10) and the measurement circuit (terminal M or 0) are connected inside the unit. Caution: This connection should not cause drift of the principal current measured.

Supply tolerance	0.85 • 1.15 x Un
Maximum power consumption	3 VA
Frequency of measured signal	10 Hz • 500 Hz
Adjustable hysteresis	5 • 50% of displayed threshold

Display accuracy of preset threshold	±10%
Repetition accuracy with constant parameters	± 0.1 %
Drifts with voltage variations	± 0.1 % (±10% Un)
with temperature variations	± 0.01 % / °C
with current variations	± 0.03 % / °C
with frequency variations	± 0.05 % / °C

Timing on energization T1	0.1 s • 10 s ± 30%
Delay on upward crossing of threshold T2 (including relay's own response time)	0.1 s • 3s, 0±20%

Availability delay	500 ms
Output relay (to meet AC1 requirements, resistive load)	1 AgCdO switch, 10 A ~ max.

Temperature limits	Use	-10 °C • + 60 °C
	Stored	-20 °C • + 70 °C

Weight	200 g		
Measurement ranges - Inputs	E1-M (5-8)	E2-M (6-8)	E3-M (7-8)
Authorized overloads current	5mA	50mA	0.5A
(*) Transient current	100mA	1A	10A
Input resistance	1Ω	0.1Ω	0.01Ω
overload. Duration :	Overload	Permanent to 20 °C	Permanent to 60 °C
120 s		1A	3 A
		< 1 s peak 20 °C *	12A
			5 A
			17 A
			55 A

Note :

Higher AC currents can be controlled using a current transformer the secondary winding of which is connected to terminals E3 or E2 or E1 (7 or 6 or 5) and M (8)

Other information

For compliance with standards etc., common characteristics, and dimensions, see page 5/53
 Wiring diagrams and application see page 5/49
 Other possible supply voltages :
 DIRT2/LIRT2 : 48 V = and 400 V ~
 Check with our nearest branch.

To order, specify :

Standard products

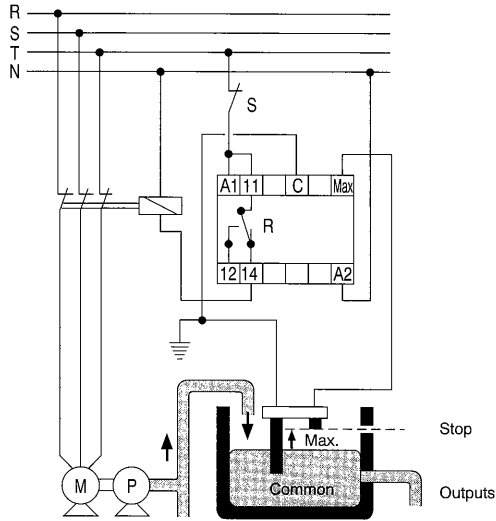
Part number

Standard products non stocked

Example : Current control relay 84 893 213

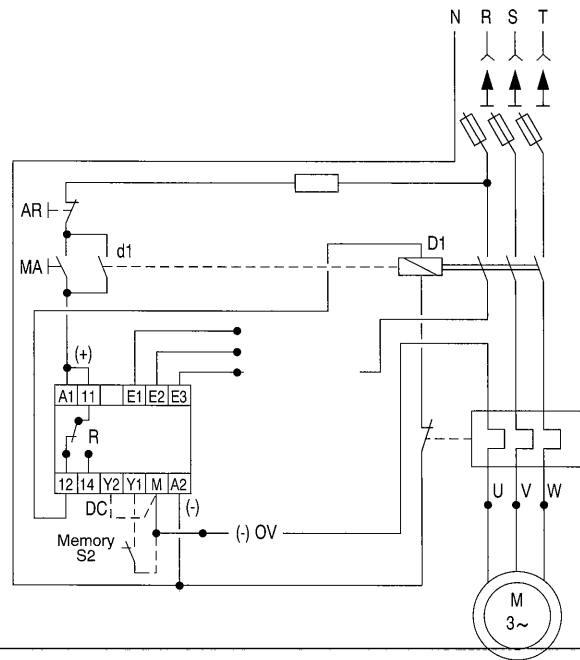
Wiring diagrams and application

DNRT2 / LNRT2



DNRT2	A1	A2	11	12	14	C	Max
LNRT2	2	10	1	4	3	6	5

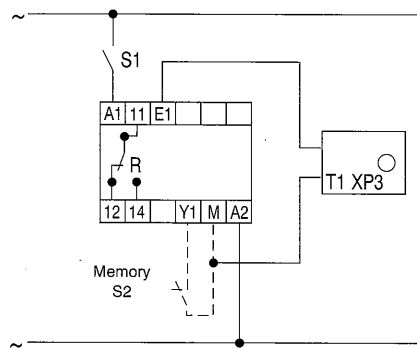
C1I - DIRT2 / LIRT2 - DIRTD2 / LIRTD2



To control DC currents, short-circuit terminals Y2 and M (11 and 8).

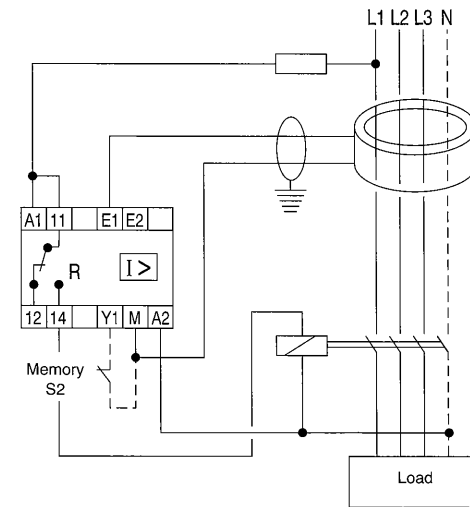
C1I - DIRT(D)2	A1	A2	11	12	14	E1	E2	E3	M	Y1	Y2
LIRT(D)2	2	10	1	4	3	5	6	7	8	9	11

DIART2 / LIART2 - DIARTD2 / LIARTD2



DIART(D)2	A1	A2	11	12	14	E1	M	Y1
LIART(D)2	2	10	1	4	3	5	8	9

DIMRT2 / LIMRT2



DIMRT2	A1	A2	11	12	14	E1	E2	M	Y1
LIMRT2	2	10	1	4	3	5	6	8	9

5