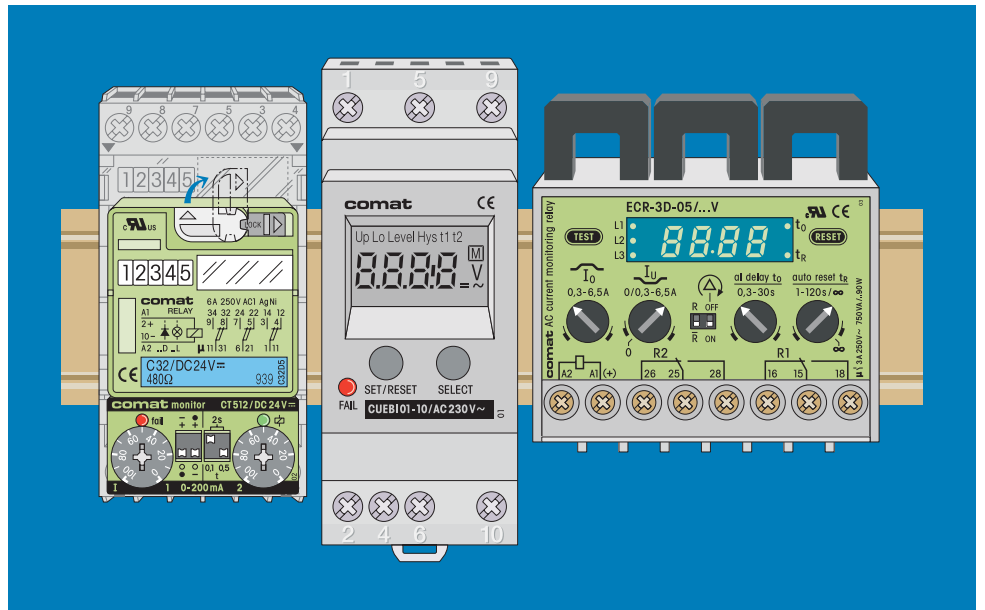


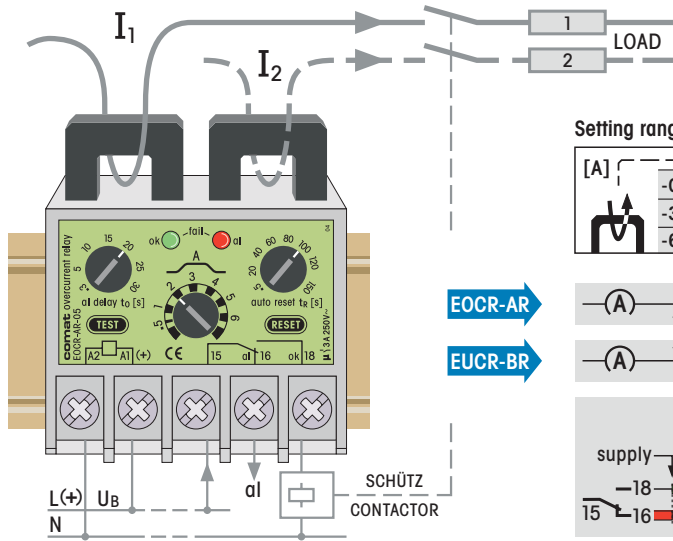
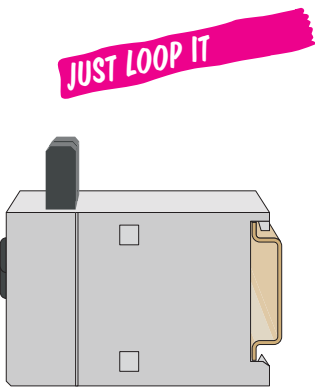
Monitoring Relays

# Current Monitoring



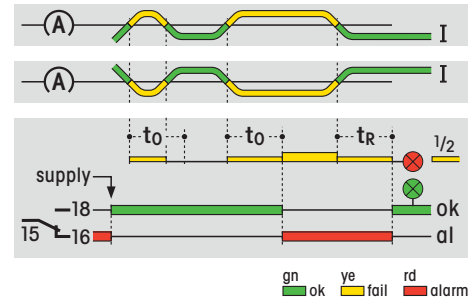
Comat products comply with different international standards and are certified accordingly.

Lloyd's; IEC 61810; EN 60974

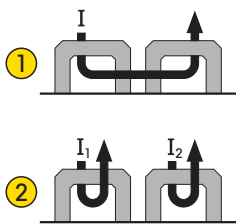


Setting ranges

[A]	1x	2x	3x	4x	5x
-05	0,5-6	0,25-3	0,17-2	0,13-1,5	0,1-1,2
-30	2,5-30	1,25-15	0,83-10	0,62-7,5	0,5-6
-60	5-60	2,5-30	1,7-20	1,25-15	1-12

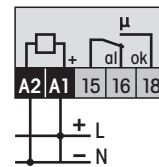


I1 fail or I2 fail = FAIL

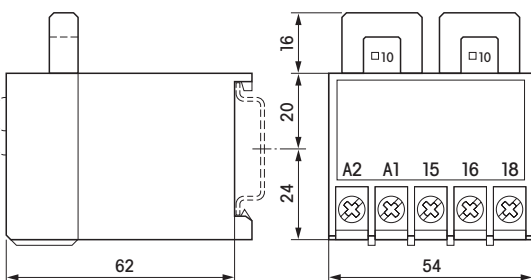




EOCR-AR / EUCR-BR

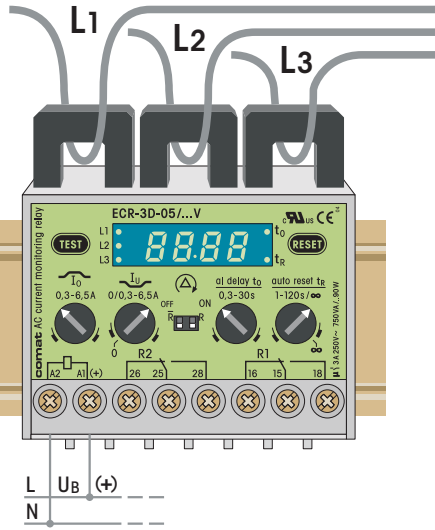
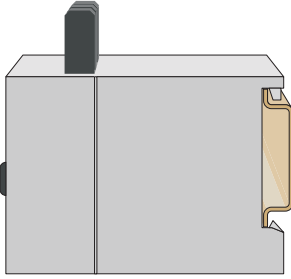
The EOCR-AR and the EUCR-BR monitor overcurrent and undercurrent on AC power circuits. One or two current paths can be monitored directly up to 60 (75) A, by means of the integrated current loop transformers. The adjustable alarm delay ( $t_o$ ) and the automatic alarm resetting ( $t_R$ ) permit universal usage in motor and transformer protection systems, monitoring of electrical heating elements and in the control of pumps, ventilation systems, suction and feed devices. The nominal monitoring range in the 3 types -05/-30/-60 can be altered by multiple looping of the conductor (see schedule above).



⌚		Data at Tamb. = 20°C
Alarm delay $t_o$		0,3 - 30s
Reset time $t_R$		0,5 - 150s
<hr/>		
Switching current/voltage		3A 250V~
Switch rating		750VA/...90W
Mechanical switching cycles		20x10 <sup>6</sup>
<hr/>		
Voltage tolerance AC/UC		0,8-1,1/1,25 U <sub>N</sub>
Power consumption		3(5)VA / 1W
Ambient temperature		-20...+60°C

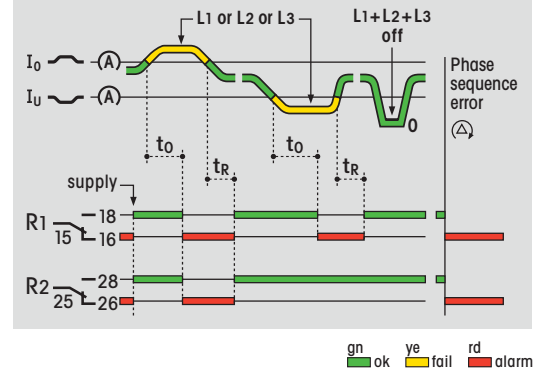


Order-Nr.	 AC 50/60Hz	 UC (AC/DC)
Over current relay	<b>05 30 60</b> EOCR-AR-... / AC 230V EOCR-AR-... / AC 115V	<b>05 30 60</b> EOCR-AR-... / UC 24V
Under current relay	<b>05 30 60</b> EUCR-BR-... / AC 230V EUCR-BR-... / AC 115V	<b>05 30 60</b> EUCR-BR-... / UC 24V

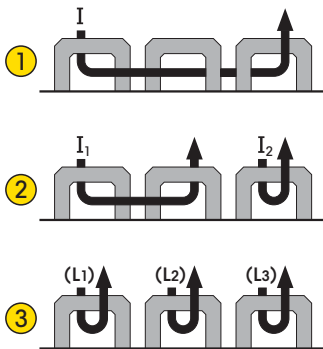


Setting ranges

[A]	1x	2x	3x	4x	5x
-05	0,5-6,5	0,25-3,2	0,17-2,1	0,13-1,63	0,1-1,3
-60	5-75	2,5-38	1,7-25	1,25-18,8	1-15

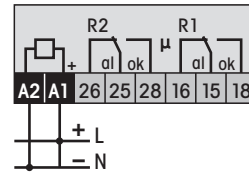


I<sub>1</sub> fail or I<sub>2</sub> fail or I<sub>3</sub> fail = FAIL

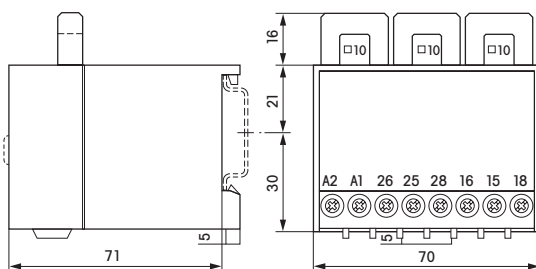


ECR-3D

The ECR-3D is for monitoring overcurrent and undercurrent on AC power circuits. Three current paths of up to 60(75)A can be monitored directly by means of the integrated current loop transformers. The adjustable alarm delay ( $t_o$ ) and the automatic alarm resetting ( $t_R$ ) permit universal usage in automation and protection techniques. The set values are displayed automatically by setting the respective parameters. Triggered faults remain stored and displayed until reset.



Data at Tamb. = 20°C	
Alarm delay $t_o$	0,3 - 30s
Reset time $t_R$	1,0 - 120s / ∞
Switching current/voltage	3A 250V~
Switch rating	750VA/...90W
Mechanical switching cycles	20x10 <sup>6</sup>
Voltage tolerance AC/UC	0,8-1,1/1,25 U <sub>N</sub>
Power consumption	3(5)VA / 1,5W
Ambient temperature	-20 ... +60°C



Order-Nr.

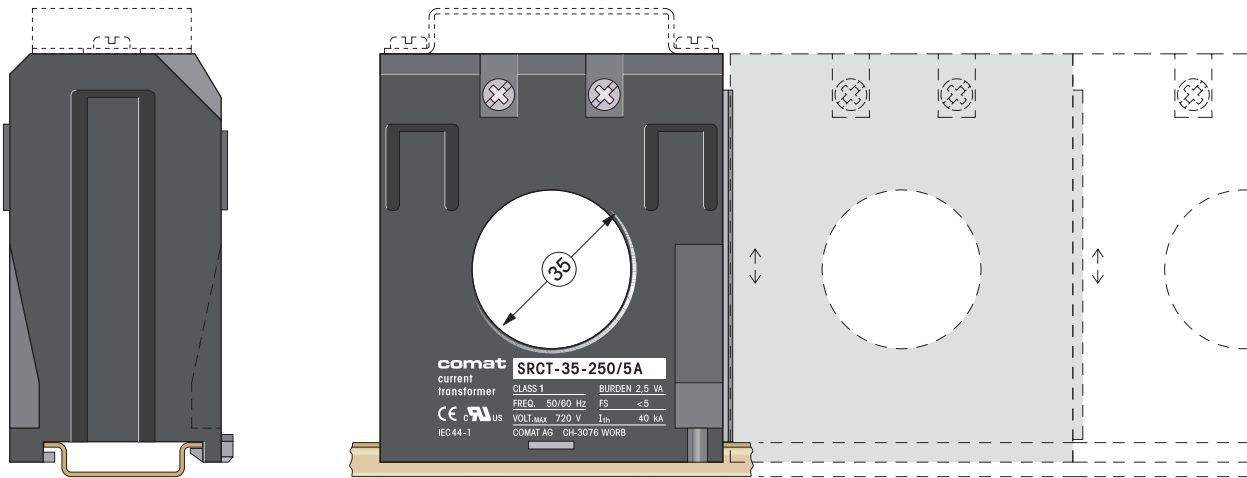
UC (AC/DC)

**05 60**  
**ECR-3D-.../UC110-240V**  
**ECR-3D-.../UC24V**

Current monitoring relays



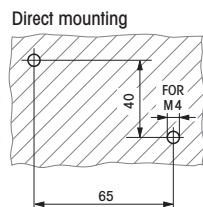
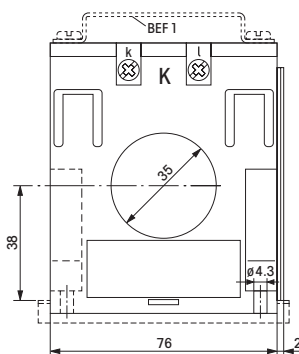
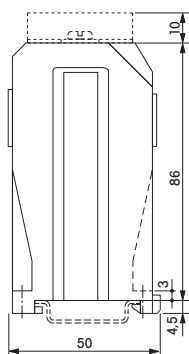
SRCT-35	- 50/5A
	- 100/5A
	- 250/5A
	- 500/5A



**SRCT-35**

Current transformers of the SRCT-35 series transform high AC currents into proportional secondary current in the ratio 10:1 (type -50) up to 100:1 (type -500). With accuracy class 1, coupled with a large power reserve (P<sub>N</sub>: 2,5 VA) and high overload capacity up to 150%, the SRCT-35 is the ideal transformer for general applications and for the use with Comat monitoring relays ..AR, ..BR, ..3D.

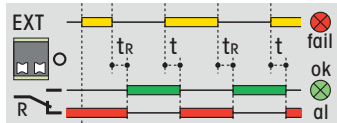
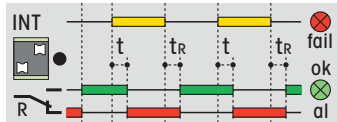
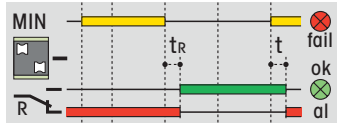
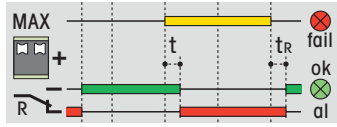
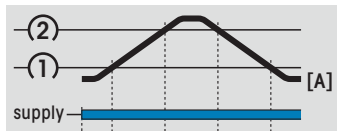
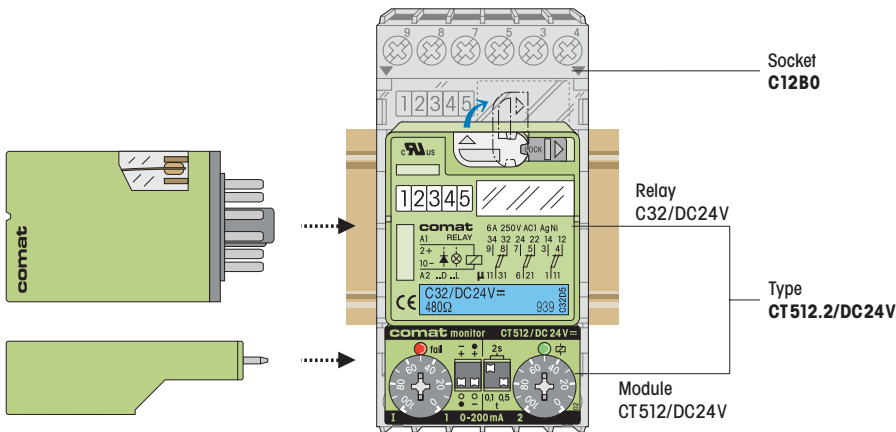
Power	2,5 VA
Accuracy	Class 1
Frequency range	50/60 Hz
Operating voltage	720 V
Overload	x 1,5 (Class 1,5)
Ambient temperature	-5...+40 °C



Order-Nr.

UC (AC/DC)  
50 100 250 500<sup>1)</sup>  
SRCT-35-.../5A

<sup>1)</sup> Other primary currents on request



gn ok ye fail rd alarm

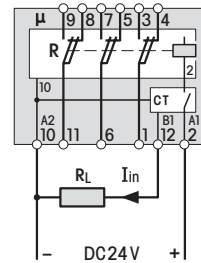
CT512, 515, 516

Economy DC Current Monitoring Relay

with 3 twin changeover contacts. Without external shunt up to 6A.

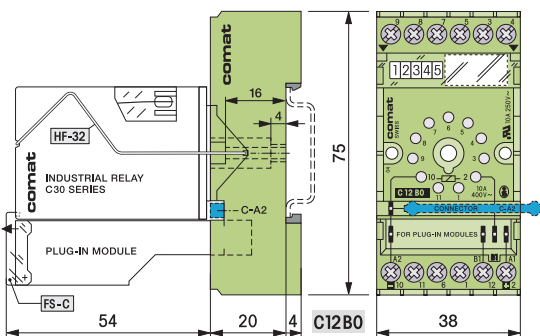
4 functions can be selected:

- Overcurrent/undercurrent monitoring with adjustable hysteresis or 2 range monitors (INT or EXT).
- Adjustable alarm delay.
- LED display for error and ok.
- Contact inspection window at the top.
- Manual safety operation.



Voltage drop (2-12)  
 CT512 : ≤ 300mV  
 CT515 : ≤ 200mV  
 CT516 : ≤ 100mV

(t)	Alarm delay t	Data at Tamb. = 20°C
	Reset time t <sub>R</sub>	0,1/0,5/2s
		100ms
	Switching current/voltage	6A 250V~
	Switch rating	1500VA/...200W
	Mechanical switching cycles	100 x 10 <sup>6</sup>
	Voltage tolerance	0,8 - 1,2U <sub>N</sub>
	Power consumption	≤ 0,5W
	Ambient temperature	-25...+60°C



Socket and Accessories: Page 97

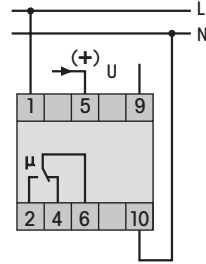
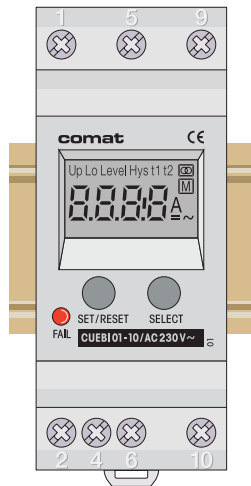
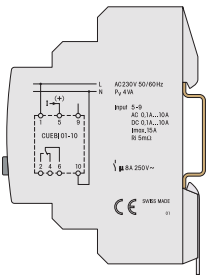
Order no.

Range	I max	⊖ ≤ 10%
0-200 mA	300 mA	CT512.2/DC 24 V
0-2 A	3 A	CT515.2/DC 24 V
0-6 A	7 A	CT516.2/DC 24 V

Type No. = Module + Relay (FS-C, HF-32 incl.)

Accessories

Socket	C12B0

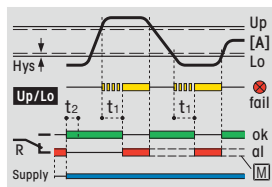
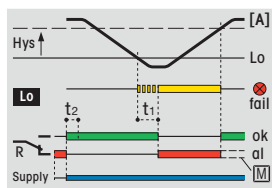
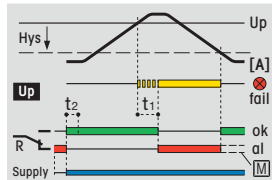


AC230V 50/60Hz  
P<sub>V</sub> 4 VA

Input 5-9  
AC 0,1A...10A  
DC 0,1A...10A  
I<sub>max</sub> 15A  
R<sub>i</sub> 5mΩ

μ 8A 250V~

Functions



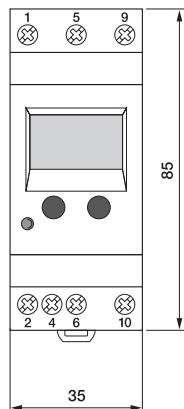
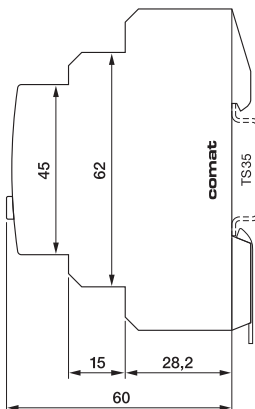
gn ok ye fail rd alarm

CUEBI01-10

Monitoring Relay

for AC or DC currents ranging from 0,1A up to 10A with start-up delay.  
LCD display for the measured value and the parameter setting.  
LED indication for the alarm status.  
Snap on to DIN-rail TS35 conform DIN (43880).

	Data at T <sub>amb.</sub> = 20°C
Monitoring range	AC/DC 0,1...10A
Hysteresis	5...50%
Input resistance R <sub>i</sub>	5mΩ
Display/Accuracy	xx,x A/2% ±1 digit
Alarm delay time t <sub>1</sub>	0,1...12s
Start-up delay t <sub>2</sub>	0,1...20s
Switching current/voltage	8A 250V AC1
Switching power AC1	2000VA / ...240W
Output contact	1x u, μ Ag Ni
Operation voltage AC50/60Hz	AC230V +10%; -15% 50/60Hz
Power consumption P <sub>max</sub>	4,5VA/2,5W
Isolation	3kVrms/1min
Temperature: operating / storage	-20...+55°C/-40...+70°C



Order-Nr.

