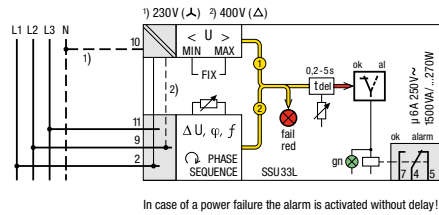


Type: SSU33L/... V

1 change over alarm contact 6 A 250 V

Monitoring function



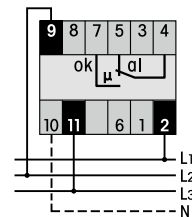
The SSU33 (50Hz) provides comprehensive monitoring of three-phase mains supplies with or without neutral. The following mains faults are monitored: Error signal ① U (V Δ , V Δ): Exceeding or dropping below the fixed voltage values Umin/Umax for L1-N or L1-L2 (no differential voltage, phase position or frequency fault).

Error signal ② U, $\Delta\phi$, Δf :

One or more of the three voltages, phase positions, phase sequence or the mains frequency are diverging from the required value. Depending on the nature of their occurrence Δ -errors are evaluated cumulatively. Any error is signalled by the red LED and is reported after expiry of the set alarmdelay time. In the correct status (ok) the green LED is illuminated (4-5 open, 4-7 closed).



Connection diagram



Measuring circuit data

	Type star with N	Type delta
Nominal mains voltage	230 V	400 V
Constant under voltage threshold $\pm 5\%$	L1 - N ≤ 160 V	L1-L2 ≤ 280 V
Constant over voltage threshold $\pm 5\%$	L1 - N ≥ 275 V	L1-L2 ≥ 480 V
Difference voltage adjustment range ¹⁾	20 ... 100 V	20 ... 100 V to N
ϕ adjustment range ¹⁾	3 ... 15 °	3 ... 15 °
f adjustment range ¹⁾	3 ... 15 Hz	3 ... 15 Hz

¹⁾ adjustment with the same rotary knob

Time data

Alarm delay adjustment range	0.2 ... 5 s
Reset time	50 ms

Contacts

Type / Material	1 CO, micro disconnection / AgNi
Rated operational current	6 A
Max. inrush current (10 ms)	30 A
Max. switching voltage	250 V
Max. AC load AC-1 (Fig.1)	1500 VA
Max. DC load DC-1, 30 V / 250 V (Fig.2)	180 W / 75 W
Recommended min. contact load	10 mA / 12 V

Power supply data

	Type star with N	Type delta
Nominal mains voltage	230 V	400 V
Operating voltage range	160 ... 275 V	280 ... 470 V
Power consumption	1.5 W	1.5 W
Input current	1.5 mA	1.5 mA
Frequency	50 Hz	50 Hz

Insulation

Test voltage between contacts and supply	2 kVrms 1 minute (basic insulation)
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General specifications

Ambient temperature storage /operation	-40 ... +85 °C / -25 ... +60 °C
Mechanical life of contacts	30 x 10 ⁶ operations
Ingress protection degree	IP 40 when plugged in
Housing material	Lexan, alu front plate
Weight	300 g

Standard types

AC 230 50 Hz	SSU33L/AC230V (Star connection)
AC 400 50 Hz	SSU33L/AC400V (delta connection)

Accessories: Socket:

S-3B

Retention clip:

HF-24

Front panel mounting set:

FZ-23

Fig.1 AC voltage endurance

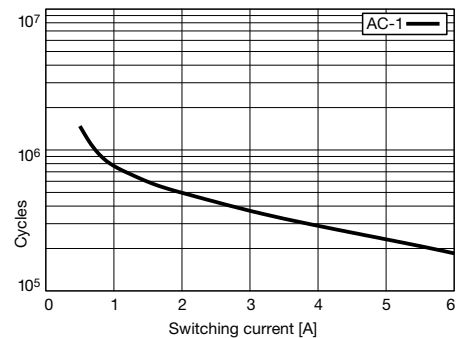
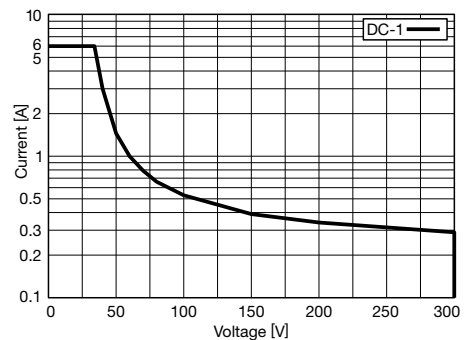
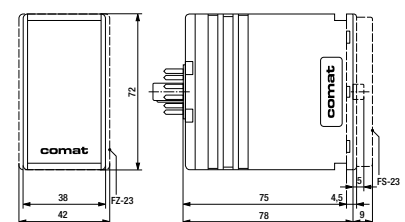


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities

EN 60947