

POWER QUALITY
multicomp 3F144 LCD
3-phase-reactive power controller



PRODUCTS AND SOLUTIONS
FOR CONTEMPORARY
ENERGY MANAGEMENT

MADE IN
GERMANY

One System. Best Solutions.

multicomp 3F144 LCD

Housing dimensions (H x W x D in mm)	144 x 144 x 68
Data display	illuminated LCD
Interface	KBR eBus Modbus*



*in preparation

Three-phase reactive power controller

Highlights

- Detecting and compensating the missing compensation power in case of return feed
- 18 stages for single-phase or three-phase compensation
- Switching of capacitive and inductive stages
- Limiting value monitoring function for the protection of capacitors from overvoltages and excessive harmonic load.
- Integrated temperature measurement input for monitoring the ambient temperature and switching on fans
- Illuminated graphic display 128 x 96 pixel with dimming function

The **multicomp 3F144 LCD** reactive power controller automatically works in 4-quadrant operation (generator operation), i.e. even with return feed into the energy supplier network, missing compensation power is detected and compensated without any problem. Through the integrated temperature measurement input, the ambient temperature in the reactive power compensation unit is

also monitored, and if a predefined limiting temperature is exceeded, the ventilator is switched on. Through the three-phase recording of voltage and current, not only the usual three-phase compensation is possible, but also single-phase compensation or a combination of single-phase and three-phase compensation.

Technical details

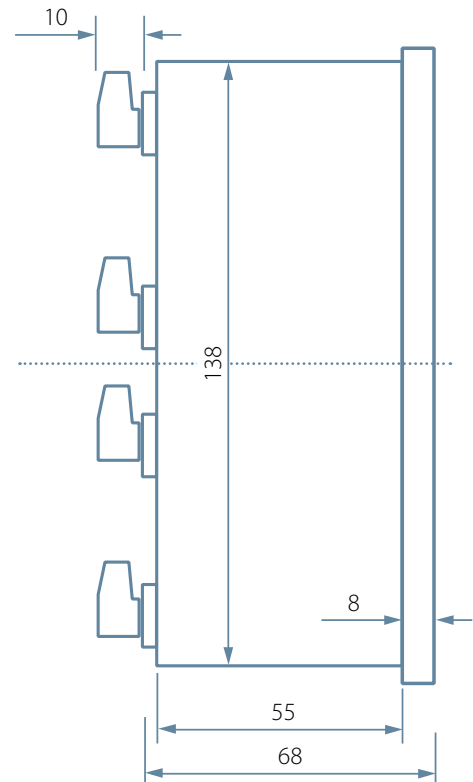
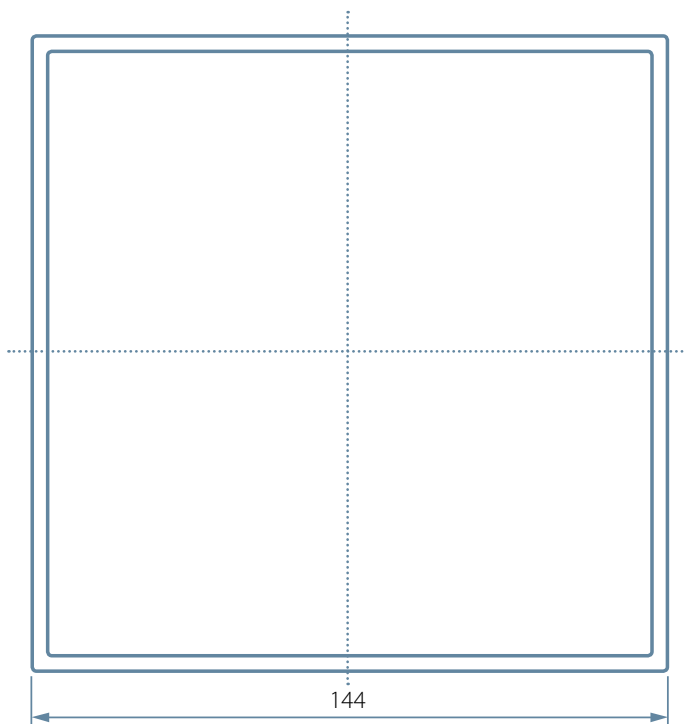
		DEVICE TYPE	multicomp 3F144 LCD
SWITCHING STAGES	Relay outputs; 250 VA per output; 250 V AC: 50/60 Hz		18
	Power per stage [kvar] programmable		0 to 9999,9 kvar ind. or kap.
	Discharge times programmable		10 ms to 999,99 sec.
	Manual-0-automatic switch status display		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
	Rotary field / phase allocation programmable		- <input checked="" type="checkbox"/> (I _{Main})
SWITCHING PERFORMANCE	Self-optimizing (circuit switching of the same stages)		<input checked="" type="checkbox"/>
	Special switching functions for		Group switching
	Switch-off limit for light load operation		Programmable
MONITORING FUNCTIONS	No-voltage trigger		<input checked="" type="checkbox"/>
	Overvoltage switch-off		<input checked="" type="checkbox"/>
	Temperature measurement and monitoring with fan control and emergency switch-off		<input checked="" type="checkbox"/>
	Harmonics monitoring with alarm message and emergency switch-off additional displays		<input checked="" type="checkbox"/>
	Alarm messages programmable		<input checked="" type="checkbox"/>
	Target cos φ monitoring; alarm if unaccessible		<input checked="" type="checkbox"/>
	Switching operation monitoring with display per stage		<input checked="" type="checkbox"/>
SPECIAL OPERATING MODE	Controller status display (over / undercompensation)		<input checked="" type="checkbox"/>
	Single-phase compensation		<input checked="" type="checkbox"/>
DISPLAYS	Display type		LCD
	Measurement parameters (RMS values)		U_{PH-N} , U_{PH-PH} , I_{Main} , $\cos \varphi$, f_{Net} , S-P-Q, S-P-Q _{total} , Q _{total demand} , Temp.
	Operating time display		<input checked="" type="checkbox"/>
MEASUREMENT	Measuring precision: Voltage current power		1% 1% 2%
	Update speed		20 ms
	Single phase measurement (4Q)		Phase - zero
	Three-phase measurement		3x Phase - zero

Standard version – Not available

Technical details / Dimensions

		DEVICETYPE	multicomp 3F144 LCD
MEMORY	Long-term memory for switching operations		-
PASSWORD PROTECTION	With digit code		■
INPUTS	Voltage path	Low-voltage; direct measurement	Three-phase / single-phase
		Medium voltage	-
	Current path	Main current transformer	Three-phase / single-phase
		Induced current transformer	-
	Frequency range	40 to 62 Hz	
2. Setpoint cos φ2	Automatic switchover in case of energy recovery	■ ■	
OUTPUTS	Additional relay outputs error message relay / fan relay		■ ■
INTERFACES	Serial interface RS485		eBus, Modbus RTU in preparation
POWER SUPPLY	Operating voltage frequency power consumption		85 - 265 V AC/DC, 5 - 15 VA / 9 W, 50/60 Hz
DIMENSIONS	Housing: Switchboard installation, dimensions in mm (H x W x D) Switchboard cutout, in mm (H x W)		144 x 144 x 68 138 x 138

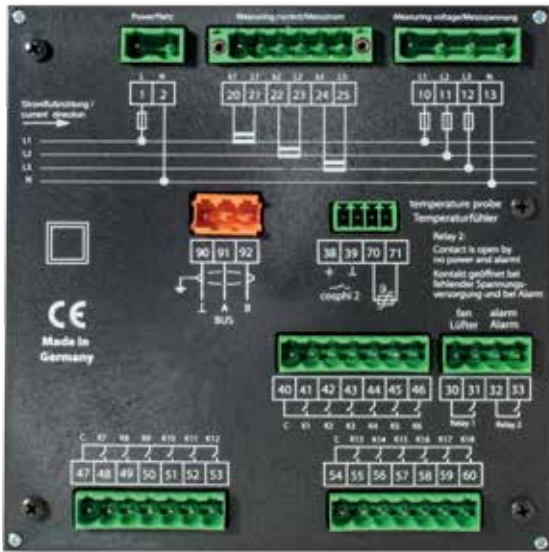
Dimensions multicomp 3F144 LCD



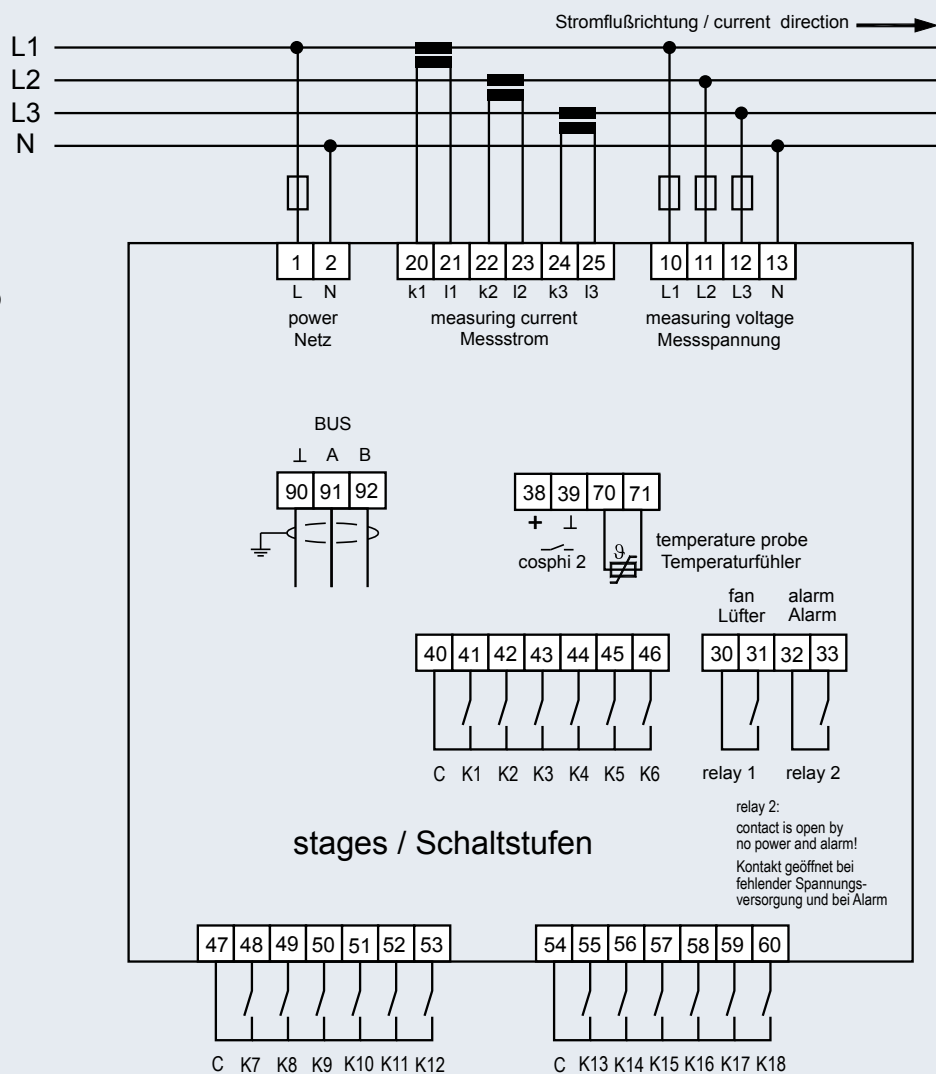
■ Standard version – Not available

All dimensions in mm. Not suitable for taking measurements.

Connection chart



Connection chart
multicomp 3F144 LCD





KBR Kompensationsanlagenbau GmbH

Am Kieferschlag 7
D-91126 Schwabach

T +49 (0) 9122 6373-0
F +49 (0) 9122 6373-83
E info@kbr.de

www.kbr.de