

# multicab-R Technical details

DEVICE TYPE	multicab-R small systems		Group back-up fuse with NH fuses and fuse sockets (NH-disconnector on request)
	SWSH p = 5.5, 7 or 8%	SWSB p = 12.5 or 14%	
Rated voltage   Frequency	U <sub>n</sub> = 400 V   50 Hz		
Maximum permissible operating voltage	U <sub>n</sub> = 400 V ± 10%		
Maximum permissible operating current	1.3 x I <sub>n</sub> , permanently		
REACTIVE POWER CONTROLLER	<b>multicomp 144 LCD</b> 4-quadrant operation Optimizing controller behavior Circuit switching	<b>multicomp 4D6</b> with display 4-quadrant operation Optimizing controller behavior Circuit switching	
Current transformer connection	1 A and 5 A		
Safety and maintenance concept secureC	Only in connection with <b>multicomp 4D6</b>		<input type="checkbox"/>
SWITCH ELEMENT	Capacitor contactors		Capacitor contactors
Control voltage	U <sub>Control</sub> = 230 V, 50 Hz		U <sub>Control</sub> = 230 V, 50 Hz
	Control voltage transformer required for deviating operating voltage		
Switch delay	60 s		60 s
CAPACITORS	Low-loss <b>multicond-UHPC</b> power capacitors, MTK technology		
Capacitor rated voltage	U <sub>Meas.</sub> = 440 V	U <sub>Meas.</sub> = 525 V	U <sub>Meas.</sub> = 440 V
Discharge of capacitors	Discharge resistors t < 60 s Optional discharge inductors t < 3 s		Discharge resistors t < 60 s Optional discharge inductors t < 3 s
FILTER CIRCUIT REACTORS	Linear filter circuit reactors to avoid resonances in networks with harmonics, built-in temperature monitoring		
Reactor factors	p = 5.5, 7 or 8%	p = 12.5 or 14%	p = 5.5, 7 or 8%
HOUSING DESIGN	Steel sheet cabinet, painted inside and outside with color RAL 7035 (other colors on request), Module plates galvanized, Door hinge on left (optionally on right), energy supply below (above on request), Protection class I		
Mode of protection	IP 20 (IP 54 on request), the components used correspond to BGV-A2		
AMBIENT TEMPERATURES	+40 °C highest value, briefly +35 °C in 24-hour average +20 °C in annual average -10 °C lowest value		
VENTILATION	Built-in ceiling ventilation, temperature-controlled		
FUSE PROTECTION	Group back-up fuse with NH fuses and fuse sockets (NH-disconnector on request)		

Optionally available – Not available

e sockets	<b>multicab-R combination filter</b>	<b>multicab-R thyroswitch</b>
		p = 5.5, 7 or 8%  p = 12.5 or 14 %
	U <sub>n</sub> = 400 V   50 Hz	
	U <sub>n</sub> = 400 V ± 10 %	
	1.3 x I <sub>n</sub> permanently	
	<b>multicomp 4D6</b> with display 4-quadrant operation Optimizing controller behavior Circuit switching	<b>BR 6000T</b> High-speed controller
	1 A and 5 A	
	□	–
	Capacitor contactors	Thyristors
	U <sub>Control</sub> = 230 V, 50 Hz	DC gating: U <sub>Control</sub> = 10 – 30 V AC gating: U <sub>Control</sub> = 230 V, 50/60 Hz  Gating via reactive power controller or directly via SPS or process sliders
	Control voltage transformer required for deviating operating voltage	
	60 s	DC gating: 1 – 15 ms, dynamic controller required AC gating: 10 – 25 ms with direct gating  500 ms for gating via standard reactive power controller
	Low-loss <b>multicond-UHPC</b> power capacitors, MTK technology	
U <sub>Meas.</sub> = 525 V	U <sub>Meas.</sub> = 525 V	U <sub>Meas.</sub> = 525 V
	Discharge resistors t < 60 s Optional discharge inductors t < 3 s	Through EPL technology, no discharge time can be maintained during operation. Discharge resistors t < 60 s <b>No discharge reactor possible</b>
ing	Linear filter circuit reactors to avoid resonances in networks with harmonics, built-in temperature monitoring	
p = 12.5 or 14%	p = 5.5 and 12.5 %	p = 12.5 or 14 %  p = 12.5 or 14 %
	Steel sheet cabinet, painted inside and outside with color RAL 7035 (other colors on request), Module plates galvanized, Door hinge on left (optionally on right), energy supply below (above on request), Protection class I	
	IP 20 (IP 54 on request), the components used correspond to BGV-A2	
	+40 °C highest value, briefly +35 °C in 24-hour average +20 °C in annual average –10 °C lowest value	
	Built-in ceiling ventilation, temperature-controlled	
	Group back-up fuse with NH fuses and fuse sockets (NH-disconnector on request)	