

Reactive current  
compensation units

# multimod-R

Monitoring



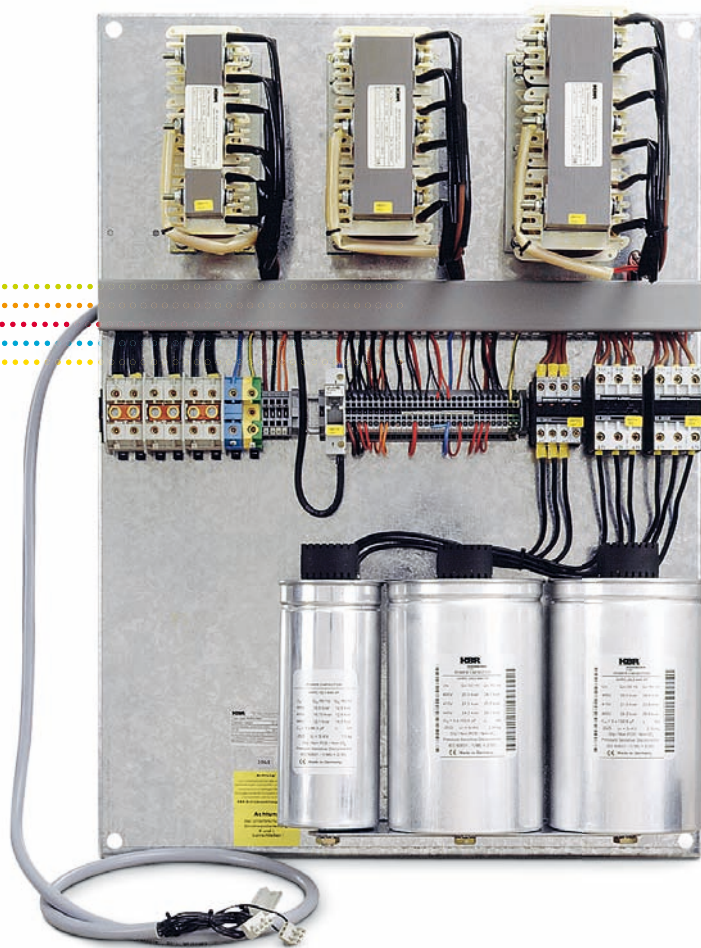
Optimizing



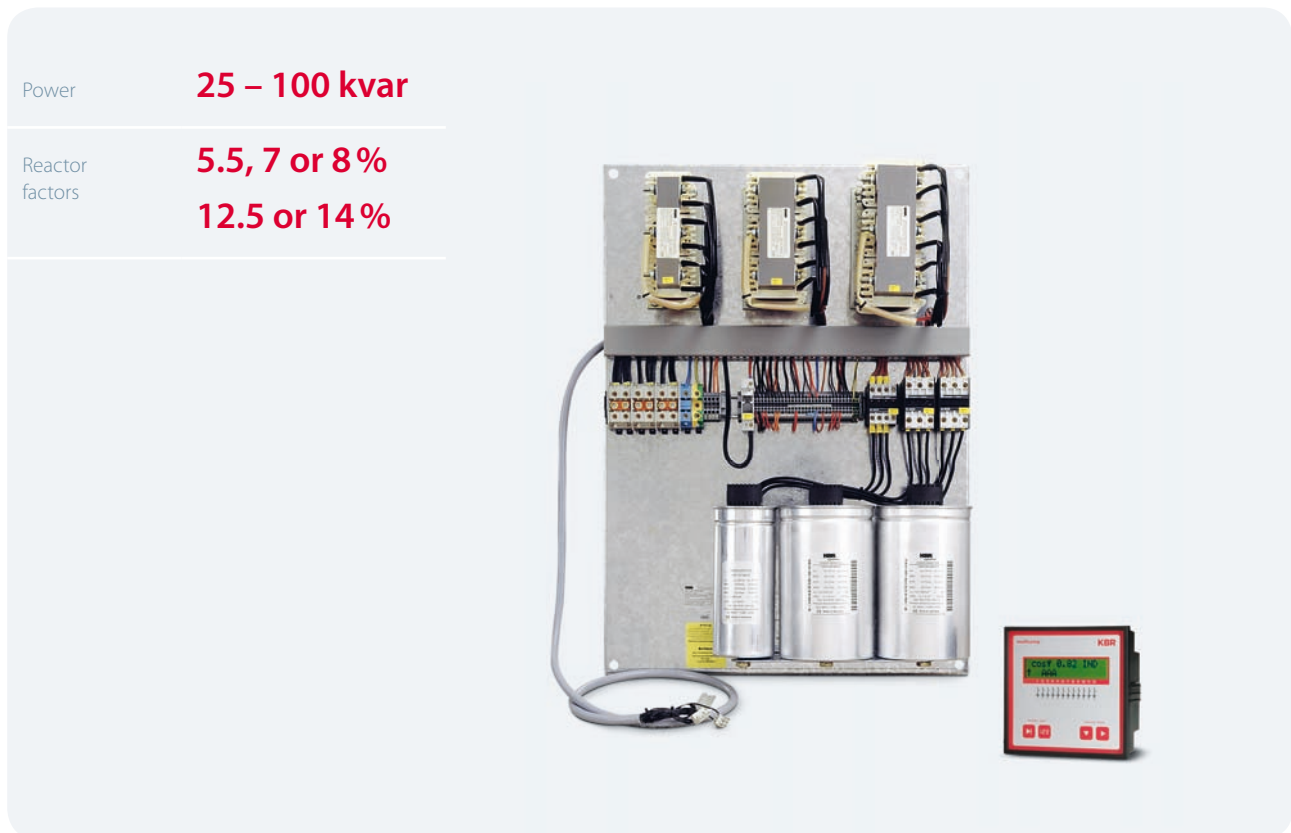
**multimod-R** reactive current compensation units are delivered on an assembly plate. The complete units, wired and ready for connection, are suitable for installation in existing switchgear cabinets and stand out because of their quick and easy assembly.

**multimod-R ... AH**

Detuned reactive current compensation unit with power from 25 to 100 kvar and reactor factors of 5.5, 7, 8, 12.5 or 14%. On assembly plate, completely wired and ready for connection for quick and uncomplicated installation.



## multimod-R Assembly plate



### Detuned reactive current compensation unit on assembly plate

- Highlights**
- Power from 25 to 100 kvar
  - Reactor factors 5.5, 7 or 8 % and 12.5 or 14 %
  - Capacitor rated voltage with 440 V or 525 V
  - Completely wired
  - Simple assembly
  - Facility with reactive current controller

**Selection of back-up fuses and supply lines** for complete facilities can be found on pages 224/225.

An overall view of **technical details** can be found on page 164.

The **housing dimensions** are listed on page 165.

## Specifications multimod-R ... AH

**Fitting unit on assembly plate** Reactor factors: **5.5, 7 or 8 %** Capacitor rated voltage: **440 V**

POWER <sup>1</sup> in kvar	TYPE (facility with controller)	STAGES in kvar	CONTROL- LER STAGES	CONSTRUC- TION TYPE <sup>2</sup>	WEIGHT approx. in kg
25	multimod-R 025/05-1220- <b>XX</b> -60AH	5 – 10 – 10	6	P1	43
30	multimod-R 030/06-1230- <b>XX</b> -60AH	5 – 10 – 15	6	P1	47
35	multimod-R 035/07-1240- <b>XX</b> -60AH	5 – 10 – 20	6	P1	48
40	multimod-R 040/04-1120- <b>XX</b> -60AH	10 – 10 – 20	6	P1	52
50	multimod-R 050/05-1220- <b>XX</b> -80AH	10 – 20 – 20	6	P2	63
50	multimod-R 050/10-1234- <b>XX</b> -80AH	5 – 10 – 15 – 20	6	P2	69
60	multimod-R 060/06-1230- <b>XX</b> -80AH	10 – 20 – 30	6	P2	74
70	multimod-R 070/07-1240- <b>XX</b> -80AH	10 – 20 – 40	6	P2	79
75	multimod-R 075/06-1122- <b>XX</b> -80AH	12,5 – 12,5 – 25 – 25	6	P2	92
100	multimod-R 100/05-1220- <b>XX</b> -80AH	20 – 40 – 40	6	P2	100
100	multimod-R 100/08-1124- <b>XX</b> -80AH	12,5 – 12,5 – 25 – 50	6	P2	103

## Specifications multimod-R ... AB

**Fitting unit on assembly plate** Reactor factors: **12.5 or 14 %** Capacitor rated voltage: **525 V**

POWER <sup>1</sup> in kvar	TYPE (facility with controller)	STAGES in kvar	CONTROL- LER STAGES	CONSTRUC- TION TYPE <sup>2</sup>	WEIGHT approx. in kg
25	multimod-R 025/05-1220- <b>XX</b> -60AB	5 – 10 – 10	6	P1	57
30	multimod-R 030/06-1230- <b>XX</b> -60AB	5 – 10 – 15	6	P1	60
35	multimod-R 035/07-1240- <b>XX</b> -60AB	5 – 10 – 20	6	P1	68
40	multimod-R 040/04-1120- <b>XX</b> -60AB	10 – 10 – 20	6	P1	76
50	multimod-R 050/04-1120- <b>XX</b> -80AB	12,5 – 12,5 – 25	6	P2	90
50	multimod-R 050/05-1220- <b>XX</b> -80AB	10 – 20 – 20	6	P2	93
60	multimod-R 060/04-1120- <b>XX</b> -80AB	15 – 15 – 30	6	P2	91

<sup>1</sup> Power at 400 V, 50 Hz <sup>2</sup> Measurement details and other details on the construction can be found on page 165

**XX = It is important that you state the reactor factor when ordering** (see also following order example).

Performances and sizes deviating from the standard are available on request. All changes reserved.

**Example for order:** Fitting unit on assembly plate, 75 kvar in 6 stages, 440 V capacitors, 7 % detuned.

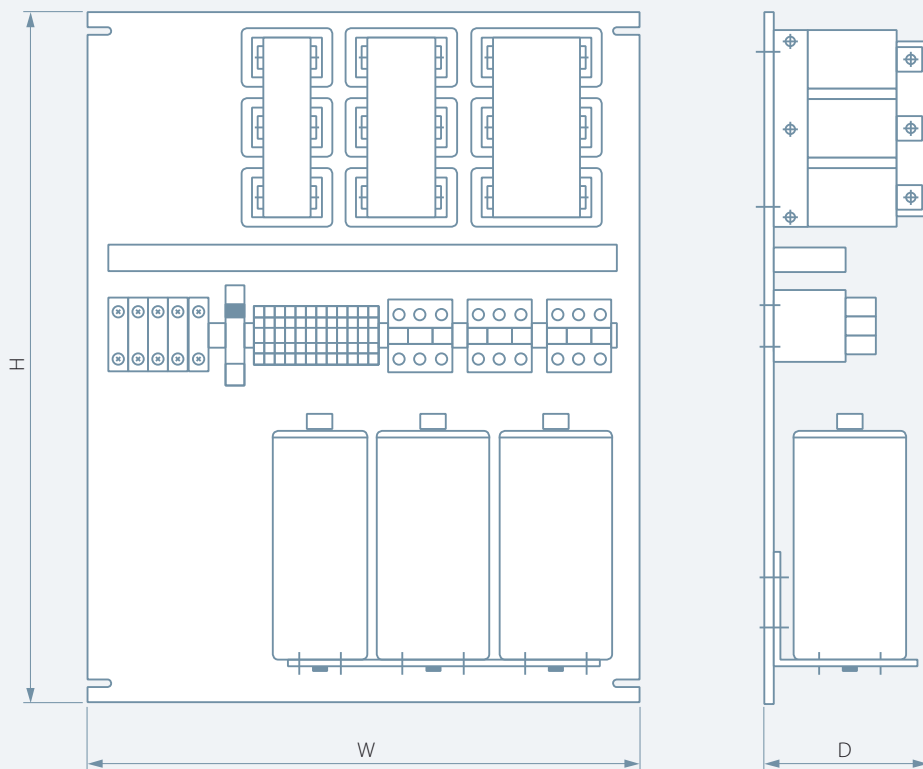
The appropriate ordering detail is as follows: **Type multimod-R 075/06-1122-07-80AH.**

# multimod-R Technical details

DIVICE TYPE	multimod-R fitting units	
	AH p = 5.5, 7 or 8 %	AB 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	
Current transformer connection	1 A and 5 A	
Safety and maintenance concept secureC	Only in connection with <b>multicomp 4D6</b>	
SWITCH ELEMENT	Capacitor contactors	
Control voltage	U <sub>control</sub> = 230 V, 50 Hz control voltage transformer required if operating voltage deviates	
Switch delay	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
Discharge of capacitors	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 %
FITTING UNITS - DESIGN	Module plates galvanized	
Mode of protection	IP 00, 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	
FUSE PROTECTION	Group back-up fuse with NH fuses and fuse sockets (NH-disconnector on request)	

# multimod-R Sizes

multimod-R  
Fitting unit on assembly plate



CONSTRUCTION TYPE	HEIGHT (H) in mm	WIDTH (W) in mm	DEPTH (D) in mm
P1	770	550	280
P2	970	750	280

All measurement details in mm. Not suitable for taking measurements.