



OPTIM FRM-25-440, Fixed capacitor with armonic filter

Code: R5Y350.

> Cable section (mm2): 10

> kvar (400 V): 21 > kvar (440 V): 25

> Cut off power: 50 kA > Use voltage (V): 440

#### Description

The FRF / FRM Series capacitor banks with detuned filters have been designed for power compensation purposes in motors and transformers with a constant load level, a high content of harmonics and where there is a risk of resonance. Including:

- $\circ$  FRF: general protection with NH-00 fuses with a high rupture power (HRP) for the capacitor.
- o **FRM**: general circuit breaker protection for the capacitor.

### **Application**

Its application is mainly based on the compensation of transformers and motors. In general, it is used for the compensation of installations under constant loads and where there is a high content of harmonics in the network.







Fixed capacitor with rejection reactance p = 7 %

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## **Specifications**

Losses (W)	Dielectric: < 0.2 W/kvar Total: < 0.5 W/kvar	
Discharge resistance	75 V / 3 min	
Surge	17 $\%$ 8 h over 24 h 15 $\%$ up to 15 min over 24 hours 20 $\%$ up to 5 min over 24 hours 30 $\%$ up to 1 min over 24 hours	
Reinforcement voltage	440 V	
Tolerance C	±10 %	
Mechanical characteristics		
Size (mm) width x height x depth	650 x 1060 x 420 (mm)	
Fastening	Vertical	
Ventilation	Natural or forced according to options	
Weight (kg)	78	
Environmental characteristics		
Protection class	IP 21	
Relative humidity (without condensation)	80%	
Current measurement circuit		
Permanent overload	1,3 In	
Standards		
Electrical safety, Maximum height (m)	2000 m	
Features / performance		
Components	CF Capacitor General tripolar circuit breaker for protection. Waste filters tuned to 189 Hz to protect harmonics present in the network and avoid resonance phenomena with harmonics of order 5 or more. It incorporates a thermostat to disconnect the step in case of high temperature (90 °C).	
Protection		
Element	Individual protection of each step with fuses with high rupture power (HRP). NH-00 Series.	

#### OPTIM FRM

Fixed capacitors with detuned reactor of P = 7% (fres=189 Hz), 50 Hz

CODE	TYPE	kvar (400 V)	kvar (440 V)	Cable section (mm2)
OPTIM FRM, mold	ded case circuit breaker protection, 440 V, 50 H	z		
R5Y350.	OPTIM FRM-25-440	21	25	10







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CODE	TYPE	kvar (400 V)	kvar (440 V)	Cable section (mm2)
R5Y370.	OPTIM FRM-37,5-440	31	37,5	16
R5Y380.	OPTIM FRM-50-440	42	50	25
R5Y390.	OPTIM FRM-60-440	50	60	35
R5Y3A0.	OPTIM FRM-75-440	62	75	50
R5Y3B0.	OPTIM FRM-100-440	83	100	70

See CFB capacitor and RZ /RBZ reactor components in the Low Voltage Capacitor and Reactor Section. Cable cross-section for installations with Un= 400 V. The installation company must ensure compliance with the low voltage directive at all times, in accordance with the particularities of each installation and type of cable







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# **Dimensions**



