

OPTIM FR4 P&P-300-480-60Hz

OPTIM FR4 P&P-300-480-60Hz, Detuned capacitor bank ,60 Hz

Code: R54SB5.

> kvar (480 V): 300
> Aut.Switch (A): 3 x 630
> Composition: 4x75
> Use voltage (V): 480
> Mounting: Floor-mounted
> P%: 7

Description

The **OPTIM FR P&P** Series capacitor banks with detuned filters have been designed for power compensation purposes in networks with fluctuating load levels, a high content of harmonics and where there is a risk of resonance. Power variations are relatively slow (in seconds) so that the switching operations are carried out with contactors.

Application

Its application is mainly focused on the compensation of installations with different loads, which require a regulated compensation, as a result of the power factor variations and where there is a high content of harmonics in the network.

- Fixed detuned filters. For the compensation of transformers and motors (**OPTIM FRF** / **FRM**)
- Automatic detuned filters, For the monitoring of variable loads (**OPTIM FR P&P**).



OPTIM FR4 P&P-300-480-60Hz

Automatic capacitor banks with detuned filters

Code: R54SB5.

Specifications

AC power supply

Frequency	60 Hz

Electrical characteristics

Losses (W)	< 0,5 W/kvar
Discharge resistance	75 V / 3 min
Surge	10 % 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
Manoeuvre voltage	Contactors: 230 V
Tolerance C	-5% / 10 %

Mechanical characteristics

Size (mm) width x height x depth	900 x 1900 x 650 (mm)
Envelope	Sheet metal RAL 7035 Grey / RAL 3005 Garnet
Thermal management	Natural or forced according to options
Fastening	Vertical / Self-supporting
Weight (kg)	355

Environmental characteristics

Protection class	IP 21
Relative humidity (without condensation)	80%
Working temperature	T° class D: Daily average: 45 °C, annual average: 35 °C, maximum: 55 °C, minimum: -50 °C

Current measurement circuit

Permanent overload	1,3 In
Transformation ratio	In / 5A

Protection

Element	Individual protection of each step with fuses with high rupture power (HRP). NH-00 Series.

OPTIM FR P&P 60Hz

Automatic capacitor banks with detuned filters (contactors switching), type P=7% (fres=227 Hz), 60 Hz.

CODE	TYPE	kvar (240 V)	Composition	Use voltage (V)	Aut.Switch (A)	P%	kvar (480 V)
OPTIM FRS P&P, automatic capacitor banks with computer SMART III regulator. Steps potections by Circuit Breaker							
R54RBN.	OPTIM FRS P&P-25-240-60Hz	25	2x5+10	240	3 x 100	7	

Creation date: 31/10/2026 - CIRCUTOR, SAU reserves the right to make technical changes or modify the content/images of this document without prior notice, in order to improve its reliability, functionality, design or for other reasons.
It accepts no liability for any errors, inaccuracies or possible lack of information in this document.



OPTIM FR4 P&P-300-480-60Hz

Automatic capacitor banks with detuned filters

Code: R54SB5.

CODE	TYPE	kvar (240 V)	Composition	Use voltage (V)	Aut.Switch (A)	P%	kvar (480 V)
R54RBP.	OPTIM FRS P&P-30-240-60Hz	30	3x10	240	3 x 125	7	
R54RBS.	OPTIM FRS P&P-40-240-60Hz	40	4x10	240	3 x 160	7	
OPTIM FR4 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54SF0.	OPTIM FR4 P&P-37,5-240-60Hz	37,5	3x12,5	240	3 x 125	7	
R54SF2.	OPTIM FR4 P&P-50-240-60Hz	50	2x12,5+25	240	3 x 200	7	
R54SF3.	OPTIM FR4 P&P-62,5-240-60Hz	62,5	12,5+2x25	240	3 x 250	7	
R54SF4.	OPTIM FR4 P&P-75-240-60Hz	75	3x25	240	3 x 250	7	
R54SF5.	OPTIM FR4 P&P-87,5-240-60Hz	87,5	12,5+3x25	240	3 x 400	7	
R54SF6.	OPTIM FR4 P&P-100-240-60Hz	100	4x25	240	3 x 400	7	
R54SF8.	OPTIM FR4 P&P-140-240-60Hz	140	20+3x40	240	3 x 400	7	
R54SF9.	OPTIM FR4 P&P-160-240-60Hz	160	4x40	240	3 x 630	7	
OPTIM FR6 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54SG3.	OPTIM FR6 P&P-180-240-60Hz	180	20+4x40	240	3 x 630	7	
R54SG4.	OPTIM FR6 P&P-200-240-60Hz	200	5x40	240	3 x 630	7	
R54SG6.	OPTIM FR6 P&P-220-240-60Hz	220	20+5x40	240	3 x 800	7	
R54SG7.	OPTIM FR6 P&P-240-240-60Hz	240	6x40	240	3 x 800	7	
OPTIM FR8 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54SH1.	OPTIM FR8 P&P-280-240-60Hz	280	7x40	240	3 x 1000	7	
R54SH2.	OPTIM FR8 P&P-320-240-60Hz	320	8x40	240	3 x 1000	7	
OPTIM FR10 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54SJ4.	OPTIM FR10 P&P-360-240-60Hz	360	9x40	240	3 x 1250	7	
R54SJ6.	OPTIM FR10 P&P-400-240-60Hz	400	10x40	240	3 x 1250	7	
OPTIM FR12 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54SK4.	OPTIM FR12 P&P-440-240-60Hz	440	11x40	240	3 x 1600	7	
R54SK6.	OPTIM FR12 P&P-480-240-60Hz	480	12x40	240	3 x 1600	7	
OPTIM FRS P&P, automatic capacitor banks with computer SMART III regulator. General protection by Circuit Breaker							
R54RB2.	OPTIM FRS P&P-50-480-60Hz		2x12,5+25	480	3 x 100	7	50
R54RB4.	OPTIM FRS P&P-75-480-60Hz		3x25	480	3 x 125	7	75
R54RB9.	OPTIM FRS P&P-100-480-60Hz		4x25	480	3 x 160	7	100
OPTIM FR4 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54SB4.	OPTIM FR4 P&P-75-480-60Hz		3x25	480	3 x 125	7	75
R54SB6.	OPTIM FR4 P&P-100-480-60Hz		2x25+50	480	3 x 200	7	100
R54SB7.	OPTIM FR4 P&P-125-480-60Hz		25+2x50	480	3 x 250	7	125
R54SB3.	OPTIM FR4 P&P-150-480-60Hz		2x25+2x50	480	3 x 250	7	150
R54SB0.	OPTIM FR4 P&P-175-480-60Hz		25+3x50	480	3 x 400	7	175
R54SB9.	OPTIM FR4 P&P-200-480-60Hz		4x50	480	3 x 400	7	200
R54SB8.	OPTIM FR4 P&P-262,5-480-60Hz		37,5+3x75	480	3 x 400	7	262,5
R54SB5.	OPTIM FR4 P&P-300-480-60Hz		4x75	480	3 x 630	7	300



OPTIM FR4 P&P-300-480-60Hz

Automatic capacitor banks with detuned filters

Code: R54SB5.

CODE	TYPE	kvar (240 V)	Composition	Use voltage (V)	Aut.Switch (A)	P%	kvar (480 V)
OPTIM FR6 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54TB3.	OPTIM FR6 P&P-337,5-480-60Hz		37,5+4x75	480	3 x 630	7	337,5
R54TB4.	OPTIM FR6 P&P-375-480-60Hz		5x75	480	3 x 630	7	375
R54TB6.	OPTIM FR6 P&P-412,5-480-60Hz		37,5+5x75	480	3 x 800	7	412,5
R54TB7.	OPTIM FR6 P&P-450-480-60Hz		6x75	480	3 x 800	7	450
OPTIM FR8 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54UC0.	OPTIM FR8 P&P-487,5-480-60Hz		37,5+6x75	480	3 x 800	7	487,5
R54UC1.	OPTIM FR8 P&P-525-480-60Hz		7x75	480	3 x 1000	7	525
R54UC2.	OPTIM FR8 P&P-600-480-60Hz		8x75	480	3 x 1000	7	600
OPTIM FR10 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54VB4.	OPTIM FR10 P&P-675-480-60Hz		9x75	480	3 x 1250	7	675
R54VB6.	OPTIM FR10 P&P-750-480-60Hz		10x75	480	3 x 1250	7	750
OPTIM FR12 P&P, automatic capacitor banks with computer SMART III regulator. Steps protection by blade fuse type NH-00.							
R54WD1.	OPTIM FR12 P&P-825-480-60Hz		11x75	480	3 x 1600	7	825
R54WD2.	OPTIM FR12 P&P-900-480-60Hz		12x75	480	3 x 1600	7	900

Creation date: 31/10/2026 - CIRCUTOR, SAU reserves the right to make technical changes or modify the content/images of this document without prior notice, in order to improve its reliability, functionality, design or for other reasons.
It accepts no liability for any errors, inaccuracies or possible lack of information in this document.