



Product	Line/commutation reactors 4EM, 4EP, 4EU	Output reactors 4EP, 4EU	Smoothing reactors 4EM, 4ET	Filter reactors 4EP, 4EU
Function	Reduction of harmonics in the power system and of current rise speeds in the input circuit of the converter.	Increase of motor service life. Increase of system availability, option of using longer motor cables.	Reduction of harmonics and current rise speeds, permitting the use of high-speed DC switches.	Choking of reactive-power compensation systems. They form a defined resonant circuit with the power factor correction capacitors.
Operating voltage	1 x 230 V AC 50 Hz 1 x 400 V AC 50 Hz 3 x 480 V AC 60 Hz 3 x 500 V AC 50 Hz 3 x 690 V AC 50 Hz 3 x 750 V AC 50 Hz	3 x 500 V AC	4ET: 1,150 V DC 4EM: 750 V DC	3 x 400 V AC
Power range ¹⁾	For drives of 0–1500 kW	For drives of 1.5–75 kW	For drives up to 30 kW, energy contents of 0.38 Ws–6,300 Ws	For filter bank rating of 5–100 kvar
Currents	1.5–1,640 A	4–150 A	1.75–40 A	8–175 A
Frequency	50 Hz (60 Hz)	Max. 200 Hz		50 Hz
Rated temperature	ta 40 °C	ta 40 °C	ta 40 °C	ta 40 °C
Degree of protection	IP00	IP00	IP00	IP00
Connection	Terminal, flat connector	Terminal, flat connector	Terminal, flat connector	Terminal, flat connector
Approval	UL	UL	UL	UL
Special features	Voltage drop of 2% related to model, and/or 4%. Permissible voltage stressing: 4EM 690 V AC, 4EU/4EP 1,000 V AC, 4EP with terminals 690 V AC	Applicable: • Clock frequency 4 kHz to 8 kHz • Motor cable max. 300 m unshielded, 200 m shielded	Ripples of the overlaid AC current ≤ 30%. Permissible voltage stressing: 4EM 690 V AC, 4ET with terminals 800 V AC, 4ET with flat connectors 1,000 V	Considered harmonic load: Basic wave I1 (50 Hz) = 106 3rd harmonic I3 (150 Hz) = 0.5 5th harmonic I5 (250 Hz) = 5% 7th harmonic I7 (350) = 5% Permissible overload 5%