

Three phase output line reactors for VFD



Three phase reactors especially designed for the filtering of the power converter output voltages.

Reduces output ripple current; this reduces the risk of motor heating.

Attenuates voltage spikes dv/dt at the output of the converter. These spikes cause premature deterioration of the motor isolation.


Reduces capacitive leakages of significant long cables avoiding the consequent overload of the converter.

Vacuum impregnation with epoxy varnish high binding power with special properties that protect windings and magnetic core from dust and humidity.

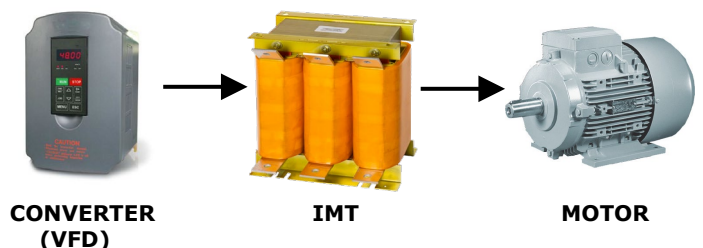
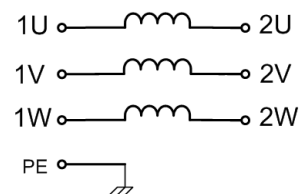
Connection with screw terminal blocks (rating up to 25 A). Connection with screws for flat terminals (rating from 30 to 80 A). Connection with flat busbars (rating over 80 A).

Converters' commutation frequency	Maximum cable lengths between VFD and motor
2 ÷ 4 kHz	200 m
5 ÷ 8 kHz	125 m
9 ÷ 10 kHz	50 m

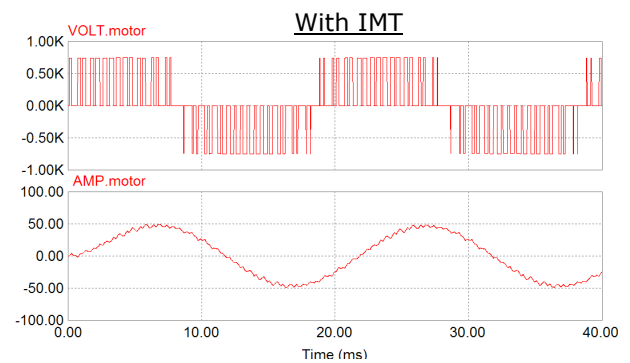
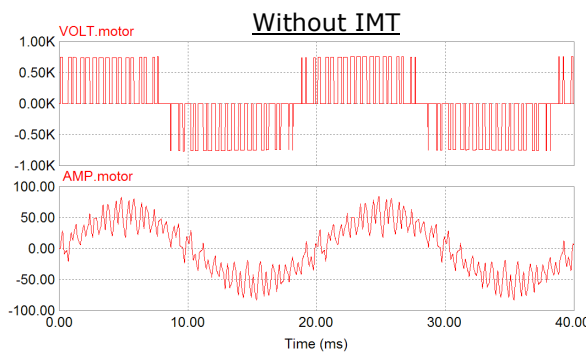
Technical characteristics

Motor rating	0,75 ÷ 630 kW (1 ÷ 855 CV)
Nominal current	2 ÷ 1200 A
Nominal voltage	380 ÷ 500 V
Inductive impedance	3 % @ 400 V 50 Hz
Maximum converters' output frequency	0 ÷ 70 Hz
Max. commutation freq.	10 kHz
Admissible overload	Permanent 1,07 I_N Transitory 1,5 I_N
Insulation class	F (155 °C)
Ambient temperature	50 °C
Protection degree	IP-00
Test voltage	4 kV
Safety class	Class I 
Standard	IEC/UNE-EN 60076-6

Electrical diagram

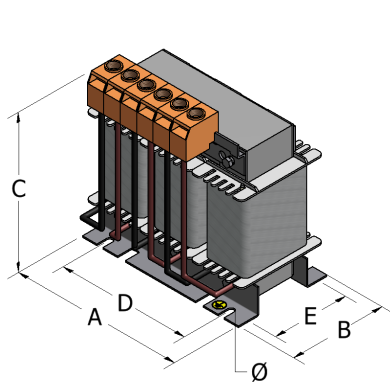


Comparative waveform of voltage-current at output of frequency converter:

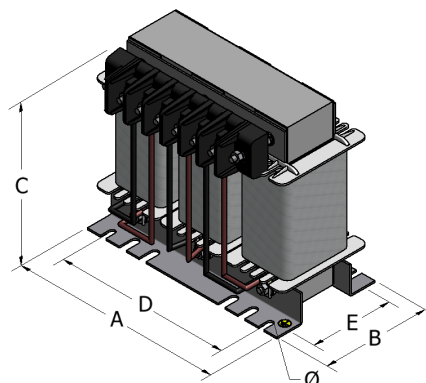


Select the reactor according to the motor rating.

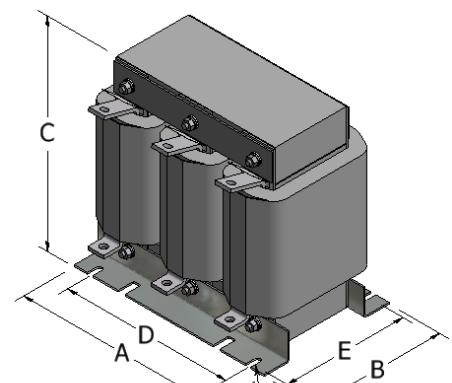
Motor rating		Rated current A	Inductance mH	Losses W	Reference	Dimensions mm						Weight kg	Type
kW	CV					A	B	C	D	E	Ø		
0,75	1	2	10,982	25	IMT002	120	75	125	94	47	6,5	1,2	I
1,5	2	4	5,491	35	IMT004	120	75	125	94	47	6,5	1,4	I
2,2	3	6	3,661	45	IMT006	120	84	125	94	57	6,5	1,9	I
3	4	8	2,745	60	IMT008	150	75	150	100	45	7	2,4	I
4	5,5	10	2,196	55	IMT010	150	75	150	100	45	7	2,7	I
5,5	7,5	15	1,464	65	IMT015	150	97	150	100	64	7	3,9	I
7,5	10	20	1,098	90	IMT020	180	97	200	140	64	7	5,4	I
11	15	25	0,879	95	IMT025	180	112	200	140	79	7	7,3	I
15	20	30	0,732	120	IMT030	240	131	210	200	90	7	9,2	II
18,5	25	40	0,549	130	IMT040	240	131	210	200	90	7	9,6	II
22	30	50	0,439	140	IMT050	240	131	210	200	90	7	10,3	II
30	40	60	0,366	150	IMT060	240	151	210	200	110	7	14,6	II
37	50	80	0,275	190	IMT080	240	166	210	200	125	7	18	II
45	60	100	0,22	200	IMT100	300	160	252	200	100	11	22	III
55	75	125	0,176	260	IMT125	300	190	252	200	120	11	28	III
75	100	150	0,146	340	IMT150	300	170	252	200	100	11	29	III
90	125	200	0,11	400	IMT200	300	190	252	200	120	11	35	III
110	150	250	0,088	460	IMT250	300	220	252	200	144	11	40	III
150	200	300	0,074	670	IMT300	360	215	363	320	139	11	51,5	III
185	250	400	0,055	750	IMT400	360	220	363	320	144	11	57	III
220	300	500	0,044	880	IMT500	420	220	424	350	144	11	76	III
300	410	600	0,037	890	IMT630	420	235	424	350	159	11	88,5	III
400	545	800	0,028	1030	IMT800	420	281	542	280	170	11	106	III
530	720	1000	0,022	1240	IMT1000	480	290	610	320	173	11	133	III
630	855	1200	0,0185	1530	IMT1200	480	315	610	320	198	11	161	III



Type I



Type II



Type III

- * All values show maximum dimensions.
- * Other features, power, voltage, etc., on request.
- * Torytrans reserves the right to modify the information in any time.