SEW EURODRIVE

Revision

Frequency inverter

MOVITRAC® LTP-B

Edition 03/2017

23508051/EN

Table of contents

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1 Revisions

INFORMATION

This is a revision to the "MOVITRAC® LTP-B" catalog.

Observe the information specified in this revision.

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2 Line chokes

The following characteristics are based on the use of line chokes for the overall system:

- Reduction of harmonic distortions in the supply system
- To support overvoltage protection
- To smoothen the line current, to reduce harmonics
- Protection in the event of distorted line voltage
- To limit the charging current when several inverters are connected together in parallel on the input end with shared line contactors (nominal current of line choke = total of inverter currents)

2.1 Technical data

2.1.1 IP20

Type		ND LT 016 180 21-20	ND LT 025 110 21-20	ND LT 006 480 53-20	ND LT 010 290 53-20	ND LT 036 081 53-20
Part number		28233417	18201652	18201660	18201679	18201687
Nominal voltage (according to EN 50160)	V_N	1 x AC 230 V, 50/60 Hz		3 x AC 230 – 500 V, 50/60 Hz		
Rated current	I_N	16 A	25 A	6 A	10 A	36 A
Inductance	L_N	1.8 mH	1.1 mH	4.8 mH	2.9 mH	0.81 mH
Ambient temperature		-25 °C to +45 °C				
IP protection		IP20 (EN 60529)				
Weight	m in kg	1.1	1.8	1.3	2.5	7.2
Assignment for AC 400 V		–	–	0008 / 0015	0022 / 0040	0055 – 0150
Assignment for AC 230 V		0008 / 0015	0022	0008	0015	0022 – 0055
UL/cUL approval		No	No	No	No	No

2.1.2 IP20/IP00

Type		ND LT 050 058 53-20	ND LT 090 032 53-20	ND LT 200 007 53-00	ND LT 300 005 53-00
Part number		18410936	18410944	28233433	28233441
Nominal voltage (according to EN 50160)	V_N	3 x AC 230 – 500 V, 50/60 Hz			
Rated current	I_N	50 A	90 A	200 A	300 A
Inductance	L_N	0.58 mH	0.32 mH	0.0735 mH	0.049 mH
Ambient temperature		-25 °C to +40 °C			
IP protection		IP20 (EN 60529)		IP00 (EN 60529)	
Weight	m in kg	8.7	16	35	48
Assignment for AC 400 V		0185 – 0220	0300 – 0370	0450 – 0900	1100 – 1600
Assignment for AC 230 V		0075 – 0110	0150 – 0185	0220 – 0450	0550 / 0750
UL/cUL approval		No	No	No	No

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2.1.3 IP66

Type		ND LT 016 183 21-66	ND LT 025 117 21-66	ND LT 006 480 63-66	ND LT 010 386 63-66	ND LT 018 204 63-66
Part number		18217680	18217699	28233409	18217710	28233425
Nominal voltage (according to EN 50160)	V_N	1 x AC 230 V, 50/60 Hz		3 x AC 230 – 600 V, 50/60 Hz		
Rated current	I_N	16 A	25 A	6 A	10 A	18 A
Inductance	L_N	1.83 mH	1.17 mH	4.8 mH	3.86 mH	2.04 mH
Ambient temperature		-25 °C to +40 °C				
IP protection		IP66 (EN 60529)				
Weight	m in kg	1	1.3	1.6	3.5	7
Assignment for AC 230 V		0008 / 0015	0022	0008	0015	0022 / 0030
Assignment for AC 400 V		–	–	0008 / 0015	0022	0040 / 0055
Assignment for AC 575 V		–	–	0008 – 0022	0040	0055 / 0110
UL/cUL approval		No	No	No	No	No

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3 Output chokes

For applications with special requirements on the output wave shape, an output choke is highly recommended to improve the functionality, reliability and service life of the system. Here are some examples:

- Long motor cables up to 300 m (the nominal length can be doubled when using an output choke), requires PWM frequency ≤ 4 kHz
- High capacity motor cable (e.g. "Pyro" wire for fire protection)
- Several motors connected in parallel
- Motors without insulation suited for inverters (usually older motors)

A series of high-quality output chokes with the following main features are available for MOVITRAC® LTP-B:

- Limiting of output voltage drop, usually < 200 V/µs
- Limiting of transient overvoltage at the motor terminals, usually <1000 V
- Suppressing line-related interference in low frequency ranges
- Compensating capacitive load currents
- Reducing HF interference emission of the motor cable
- Reducing motor losses and audible noise caused by ripple

3.1 Technical data

3.1.1 IP20

Type		HD LT 008 200 53-20	HD LT 012 130 53-20	HD LT 030 050 53-20	HD LT 075 022 53-20
Part number		18201695	18201709	18201717	18201725
Nominal voltage	V_N	3 x AC 200 – 500 V			
Rated current	I_N	8 A	12 A	30 A	75 A
Inductance	L_N	2 mH	1.3 mH	0.5 mH	0.22 mH
Degree of protection		IP20 (EN 60529)			
Weight	m in kg	1.5	2.8	4.2	8.6
Assignment for AC 400 V		0008 – 0022	0040	0055 / 0150	0185 – 0370
Assignment for AC 230 V		0008 / 0015	0022	0030 – 0075	0110 – 0185
UL/cUL approval		No	No	No	No

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3.1.2 IP00

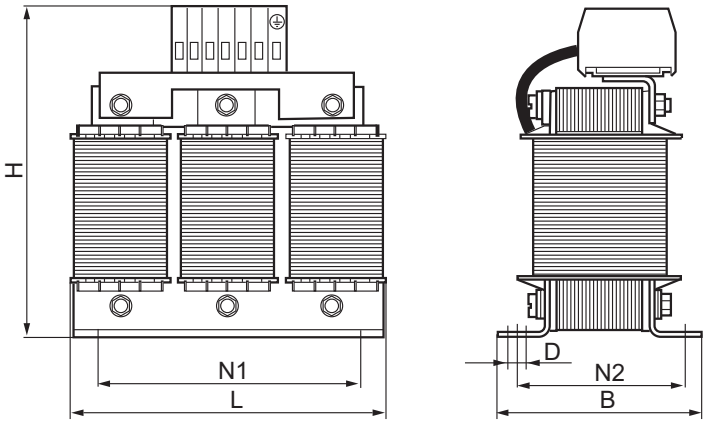
Type		HD LT 180 009 53-00	HD LT 250 007 53-00	HD LT 300 005 53-00
Part number		18201733	18201741	28233549
Nominal voltage	V_N	3 x AC 200 – 400 V		
Rated current	I_N	180 A	250 A	300 A
Inductance	L_N	0.09 mH	0.065 mH	0.053 mH
Degree of protection		IP00 (EN 60529)		
Weight	m in kg	32	35	48
Assignment for AC 400 V		0450 – 0900	1100 /1320	1600
Assignment for AC 230 V		0220 – 0450	0550 / 0750	-
UL/cUL approval		No	No	No

3.1.3 IP66

Type		HD LT 008 200 63-66	HD LT 012 120 63-66	HD LT 018 090 63-66
Part number		18216757	18216765	18216773
Nominal voltage	V_N	3 x AC 200 – 600 V		
Rated current	I_N	8 A	12 A	18 A
Inductance	L_N	2 mH	1.2 mH	0.9 mH
Degree of protection		IP66 (EN 60529)		
Weight	m in kg	1.7	3.2	3.2
Assignment for AC 230 V		0008 / 0015	0022	0030 / 0040
Assignment for AC 400 V		0008 – 0022	0040	0055 / 0075
Assignment for AC 575 V		0008 – 0040	0055 / 0075	0110
UL/cUL approval		No	No	No

3.2 Dimensions

3.2.1 IP20, 3 × 200 – 500 V



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Type	L	B	H	N1	N2	D
	mm	mm	mm	mm	mm	mm
HD LT 008 200 53-20	95	61	107	56	43	4
HD LT 012 130 53-20	125	76	158	100	55	5
HD LT 030 050 53-20	155	66	185	130	57	8
HD LT 075 022 53-20	190	92	223	170	68	8

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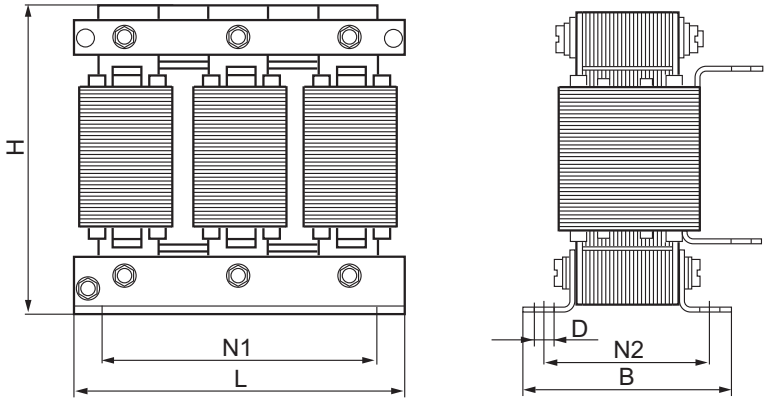
3.2.2 IP00, 3 × 200 – 400 V



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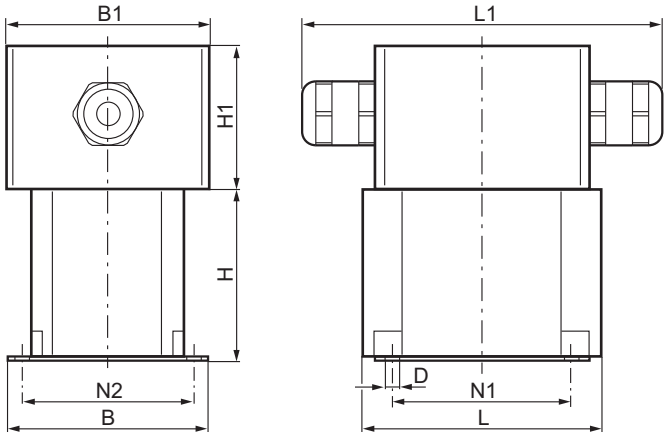
Type	L	B	H	N1	N2	D
	mm	mm	mm	mm	mm	mm
HD LT 180 009 53-00	340	138	292	248	110	10x18
HD LT 250 007 53-00	310	180	260	224	117	10x18
HD LT 300 005 53-00	380	180	310	248	139	10x18

3.2.3 IP66, 3 200 – 600 V



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Type	L	B	H	N1	N2	D	L1	B1	H1
	mm	mm	mm	mm	mm	mm	mm	mm	mm
HD LT 008 200 63-66	115	74	85	80	60	5.5 x 7	151	85	60
HD LT 012 120 63-66	140	87	110	100	70	5.5 x 12	151	85	60
HD LT 018 090 63-66	140	87	110	100	70	5.5 x 12	151	85	60

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4 Line filter

Most electrical units generate unwanted electrical interferences which affect the line voltage. All MOVITRAC® LTP-B inverters are designed in such way that these interferences are minimized. They thus offer a low interference emission, according to the table in chapter Electromagnetic compatibility. If necessary, you can use additional line filters to reduce the electromagnetic interference emission.

4.1 Technical data

4.1.1 Nominal voltage 200 – 250 V

Type		NF LT 010 201-20	NF LT 025 201-20	NF LT 010 201-66	NF LT 025 201-66
Part number		18411029	18411037	18411134	18411142
Nominal voltage (according to EN 50160)	V_N	1 x AC 200 – 250 V, 48 – 62 Hz			
Rated current	I_N	10 A	25 A	10 A	25 A
Leakage current	I	< 5 mA			
Operating temperature	T	-25 °C to +40 °C			
Degree of protection		IP20		IP66	
Weight	kg	1.32	1.5	1.4	1.6
Assignment for AC 230 V		0008	0015 / 0022	0008	0015 / 0022
UL/cUL approval		No	No	No	No

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4.1.2 Nominal voltage 220 – 440/480/500 V

Type		NF LT 006 503-20	NF LT 016 503-20	NF LT 025 503-20
Part number		18411045	18411053	18411061
Nominal voltage (according to EN 50160)	V_N	3 x AC 220 – 480 V, 48 – 62 Hz		
Rated current	I_N	6 A	16 A	25 A
Leakage current	I	< 10 mA	< 35 mA	< 35 mA
Operating temperature	T	-25 °C to +40 °C		
Degree of protection		IP20		
Weight	kg	1.58	2.5	2.7
Assignment for AC 230 V		0008	0015 – 0030	0040 / 0055
Assignment for AC 400 V		0008 – 0022	0040 / 0055	0075 / 0110
UL/cUL approval		No	No	No

Type		NF LT 006 503-66	NF LT 016 503-66	NF LT 025 503-66
Part number		18411150	18411169	18411177
Nominal voltage (according to EN 50160)	V_N	3 x AC 220 – 480 V, 48 – 62 Hz		
Rated current	I_N	6 A	16 A	25 A
Leakage current	I	< 10 mA	< 35 mA	< 35 mA
Operating temperature	T	-25 °C to +40 °C		
Degree of protection		IP66		
Weight	kg	1.6	2.5	2.7
Assignment for AC 230 V		0008	0015 – 0030	0040 / 0055
Assignment for AC 400 V		0008 – 0022	0040 / 0055	0075 / 0110
UL/cUL approval		No	No	No

Type		NF LT 050 503-20	NF LT 080 503-20	NF LT 180 503-20	NF LT 300 503-00
Part number		18411088	18411096	18411118	18411126
Nominal voltage (according to EN 50160)	V_N	3 x AC 220 – 440 V, 48 – 62 Hz	3 x AC 220 – 500 V, 48 – 62 Hz	3 x AC 220 – 440 V, 48 – 62 Hz	
Rated current	I_N	50 A	80 A	180 A	300 A
Leakage current	I	< 100 mA	< 100 mA	< 180 mA	< 180 mA
Operating temperature	T	-25 °C to +40 °C			
Degree of protection		IP20			IP00
Weight	kg	2.63	7.35	9.98	17.5
Assignment for AC 230 V		0075 / 0110	0150 / 0185	0022 – 0370	0450 – 0750
Assignment for AC 400 V		0150 – 0220	0300 / 0370	0450 – 0750	0900 – 1600
UL/cUL approval		No	No	No	No

4.1.3 Nominal voltage 600 V

Type		NF LT 006 603-20	NF LT 016 603-20	NF LT 025 603-20
Part number		18411223	18411231	18411258
Nominal voltage (according to EN 50160)	V_N	3 x AC 500 – 600 V, 48 – 62 Hz		
Rated current	I_N	6 A	16 A	25 A
Leakage current	I	< 10 mA	< 35 mA	< 35 mA
Operating temperature	T	-25 °C to +40 °C		
Degree of protection		IP20		
Weight	kg	2.7		
Assignment for AC 600 V		0008 – 0022	0040 – 0075	0110
UL/cUL approval		No	No	No

4.1.4 Nominal voltage 690 V

Type		NF LT 050 603-20	NF LT 080 603-20	NF LT 180 603-20
Part number		18411266	18411274	18411282
Nominal voltage (according to EN 50160)	V_N	3 x AC 500 – 690 V, 48 – 62 Hz		
Rated current	I_N	50 A	80 A	180 A
Leakage current	I	< 80 mA	< 100 mA	< 100 mA
Operating temperature	T	-25 °C to +40 °C		
Degree of protection		IP20		
Weight	kg	3.38	5.67	6.99
Assignment for AC 600 V		0150 – 0300	0370/0450	0550 – 1100
UL/cUL approval		No	No	No

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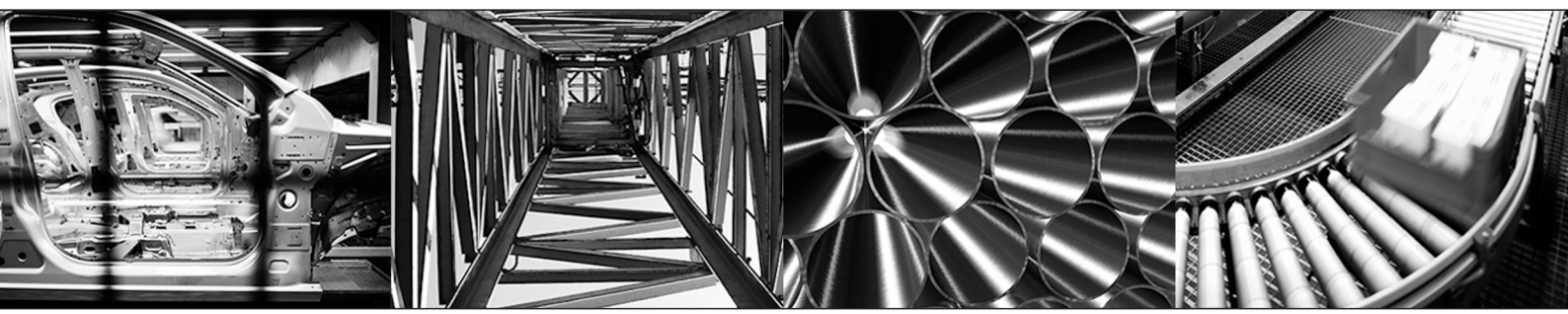

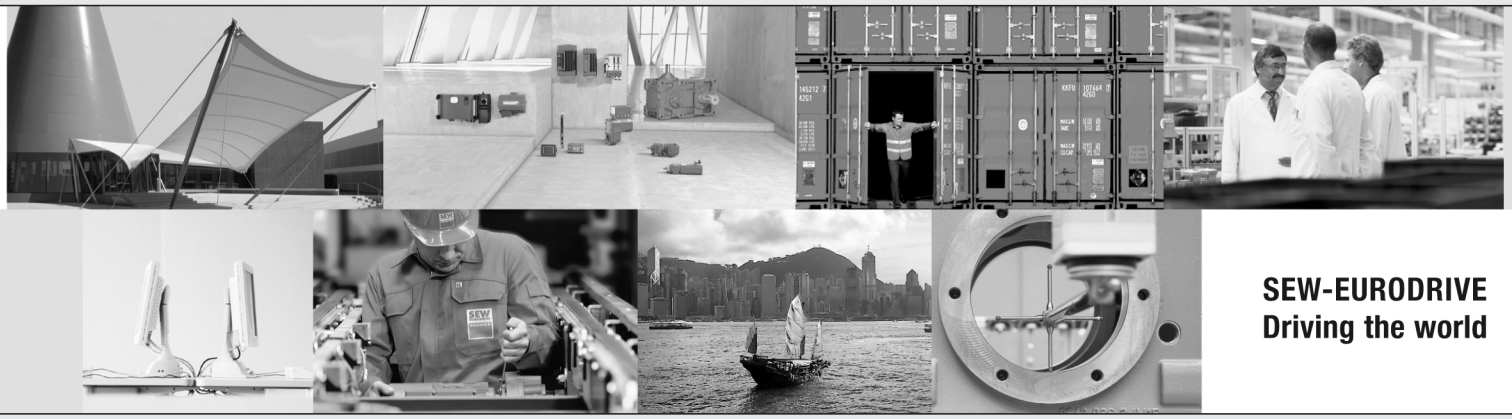

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