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Revision



MOVITRAC® LTP-B

1 Revisions



INFORMATION

This document describes the revisions made to the "MOVITRAC® LTP-B" operating instructions.

Please use the data specified in this revision. This document does not replace the detailed operating instructions.

2 Technical data

2.1 Output power and current load

2.1.1 1-phase system AC 200 – 240 V

INFORMATION



The cable cross sections and fusing recommended below apply to the use of copper conductors with PVC insulation laid in cable ducts at an ambient temperature of 25° C. Also comply with the regulations issued by specific countries and for specific machines regarding fusing and the selection of cable cross sections.

MOVITRAC® LTP-B – EMC filter class C1 according to EN 61800-3					
Power in kW			0.75	1.5	2.2
IP20 / NEMA-1 housing	Type	MC LTP-B...	0008-2B1-4-00	0015-2B1-4-00	0022-2B1-4-00
	Part number		18251382	18251528	18251641
IP55 / NEMA-12K housing	Type	MC LTP-B...	0008-2B1-4-10	0015-2B1-4-10	0022-2B1-4-10
	Part number		18251390	18251536	18251668
INPUT					
Line voltage V_{line} according to EN 50160		V	1 × AC 200 – 240 ±10%		
Line frequency f_{line}		Hz	50 / 60 ±5%		
Recommended power supply cable cross section	mm ²		1.5		2.5
	AWG		14		12
Line fuse	A		16		25 (35) ¹⁾
Nominal input current	A		8.5	13.9	19.5
OUTPUT					
Recommended motor power	kW		0.75	1.5	2.2
	PS		1	2	3
Output voltage V_{motor}	V		3 × 20 - V_{line}		
Output current	A		4.3	7	10.5
Maximum output frequency	Hz		500		
Cross section of motor cable Cu 75C	mm ²		1.5		2.5
	AWG		14		12
Max. motor cable length	Shielded	m	100		
	Unshielded		150		
GENERAL INFORMATION					
Size			2		
Heat loss at nominal output power	W		22	45	66
Minimum braking resistance value	Ω		27		
Tightening torque	Nm / lb _f .in		1 / 9		
Maximum unit terminal cross section	AWG		8		
	mm ²		10		
Maximum control terminal cross section	AWG		30 – 12		
	mm ²		0.05 – 2.5		

1) Recommended values for UL compliance

2.1.2 3-phase system AC 200 – 240 V

Sizes 2 and 3

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3								
Power in kW			0.75	1.5	2.2	3	4	5.5
IP20/ NEMA-1 housing	Type	MC LTP-B...	0008-2A3-4-00	0015-2A3-4-00	0022-2A3-4-00	0030-2A3-4-00	0040-2A3-4-00	0055-2A3-4-00
	Part number		18251358	18251471	18251617	18251722	18251765	18251846
IP55/ NEMA-12K housing	Type	MC LTP-B...	0008-2A3-4-10	0015-2A3-4-10	0022-2A3-4-10	0030-2A3-4-10	0040-2A3-4-10	0055-2A3-4-10
	Part number		18251366	18251498	18251625	18251730	18251773	18251854
INPUT								
Line voltage V _{line} according to EN 50160		V	3 × AC 200 – 240 ±10%					
Line frequency f _{line}		Hz	50 / 60 ±5%					
Recommended power supply cable cross section		mm²	1.5		2.5		4.0	6.0
		AWG	16		14		12	10
Line fuse		A	10		16	20 (35) ¹⁾	25 (35) ¹⁾	35
Nominal input current		A	4.5	7.3	11	16.1	18.8	24.8
OUTPUT								
Recommended motor power		kW	0.75	1.5	2.2	3	4	5.5
		PS	1	2	3	4	5.4	7.4
Output voltage V _{motor}		V	3 × 20 - V _{line}					
Output current		A	4.3	7	10.5	14	18	24
Maximum output frequency		Hz	500					
Cross section of motor cable Cu 75C		mm²	1.5		2.5		4.0	6.0
		AWG	16		14		12	10
Max. motor cable length	Shielded	m	100					
	Unshielded		150					
GENERAL INFORMATION								
Size			2			3		3 / 4 ²⁾
Heat loss at nominal output power		W	22	45	66	90	120	165
Minimum braking resistance value		Ω	27					22
Tightening torque		Nm / lb _f .in	1 / 9					
Maximum unit terminal cross section		AWG	8					8 / 6 ²⁾
		mm²	10					10 / 16 ²⁾
Maximum control terminal cross section		AWG	30 – 12					
		mm²	0.05 – 2.5					

1) Recommended values for UL compliance

2) IP20 housing – size 3 / IP55 housing – size 4

Sizes 4 and 5

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3						
		Power in kW	7.5	11	15	18.5
IP55 / NEMA-12K housing	Type	MC LTP-B...	0075-2A3-4-10	0110-2A3-4-10	0150-2A3-4-10	0185-2A3-4-10
	Part number		18251919	18251978	18252036	18252060
INPUT						
Line voltage V _{line} according to EN 50160		V	3 × AC 200 – 240 ±10%			
Line frequency f _{line}		Hz	50 / 60 ±5%			
Recommended power supply cable cross section		mm²	10	16	25	35
		AWG	8	6	4	2
Line fuse		A	50	63	80	100
Nominal input current		A	40	47.1	62.4	74.1
OUTPUT						
Recommended motor power		kW	7.5	11	15	18.5
		PS	10	15	20	25
Output voltage V _{motor}		V	3 × 20 - V _{line}			
Output current		A	39	46	61	72
Maximum output frequency		Hz	500			
Cross section of motor cable Cu 75C		mm²	10	16	25	35
		AWG	8	6	4	2
Max. motor cable length	Shielded	m	100			
	Unshielded		150			
GENERAL INFORMATION						
Size			4		5	
Heat loss at nominal output power		W	225	330	450	555
Minimum braking resistance value		Ω	22	12		6
Tightening torque		Nm / lb _f .in	4 / 35		15 / 133	
Maximum unit terminal cross section	AWG		6		2	
	mm²		16		35	
Maximum control terminal cross section	AWG		30 – 12			
	mm²		0.05 – 2.5			

Size 6

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3						
Power in kW			22	30	37	45
IP55 / NEMA-12K housing	Type	MC LTP-B...	0220-2A3-4-10	0300-2A3-4-10	0370-2A3-4-10	0450-2A3-4-10
	Part number		18252087	18252117	18252141	18252176
INPUT						
Line voltage V _{line} according to EN 50160		V	3 × AC 200 – 240 ±10%			
Line frequency f _{line}		Hz	50 / 60 ±5%			
Recommended power supply cable cross section		mm²	35	50	95	
		AWG	2	1	3 / 0	
Line fuse		A	100	150	200	
Nominal input current		A	92.3	112.7	153.5	183.8
OUTPUT						
Recommended motor power		kW	22	30	37	45
		PS	30	40	50	60
Output voltage V _{motor}		V	3 × 20 - V _{line}			
Output current		A	90	110	150	180
Maximum output frequency		Hz	500			
Cross section of motor cable Cu 75C		mm²	35	50	95	
		AWG	2	1	3 / 0	
Max. motor cable length	Shielded	m	100			
	Unshielded		150			
GENERAL INFORMATION						
Size			6			
Heat loss at nominal output power		W	660	900	1110	1350
Minimum braking resistance value		Ω	6	3		
Tightening torque		Nm / lb _f .in	20 / 177			
Maximum unit terminal cross section		AWG	-			
			M10 stud with nut max. 70 mm² Press cable lug DIN 46235			
Maximum control terminal cross section		AWG	30 – 12			
		mm²	0.05 – 2.5			

Size 7

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3				
Power in kW			55	75
IP55 / NEMA-12K housing	Type	MC LTP-B...	0550-2A3-4-10	0750-2A3-4-10
	Part number		18252206	18252230
INPUT				
Line voltage V _{line} according to EN 50160		V	3 × AC 200 – 240 ±10%	
Line frequency f _{line}		Hz	50 / 60 ±5%	
Recommended power supply cable cross section		mm ²	120	150
		AWG	4 / 0	–
Line fuse		A	250	315
Nominal input current		A	206.2	252.8
OUTPUT				
Recommended motor power		kW	55	75
		PS	74	100
Output voltage V _{motor}		V	3 × 20 - V _{line}	
Output current		A	202	248
Maximum output frequency		Hz	500	
Cross section of motor cable Cu 75C		mm ²	120	150
		AWG	4 / 0	–
Max. motor cable length	Shielded	m	100	
	Unshielded		150	
GENERAL INFORMATION				
Size			7	
Heat loss at nominal output power		W	1650	2250
Minimum braking resistance value		Ω	3	
Tightening torque		Nm / lb _f .in	20 / 177	
Maximum unit terminal cross section		AWG	–	
			M10 stud with nut max. 70 mm ² Press cable lug DIN 46235	
Maximum control terminal cross section		AWG	30 – 12	
		mm ²	0.05 – 2.5	

2.1.3 3-phase system AC 380 – 480 V

Sizes 2 and 3

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3									
Power in kW			0.75	1.5	2.2	4	5.5	7.5	11
IP20/ NEMA- 1 hous- ing	Type	MC LTP-B.. .	0008-5A3-4-00	0015-5A3-4-00	0022-5A3-4-00	0040-5A3-4-00	0055-5A3-4-00	0075-5A3-4-00	0110-5A3-4-00
	Part number		18251412	18251552	18251684	18251803	18251870	18251927	18251986
IP55/ NEMA- 12K housing	Type	MC LTP-B.. .	0008-5A3-4-10	0015-5A3-4-10	0022-5A3-4-10	0040-5A3-4-10	0055-5A3-4-10	0075-5A3-4-10	0110-5A3-4-10
	Part number		18251420	18251560	18251692	18251811	18251889	18251935	18251994
INPUT									
Line voltage V _{line} according to EN 50160		V	3 × AC 380 – 480 ±10%						
Line frequency f _{line}		Hz	50 / 60 ±5%						
Recommended power supply cable cross sec- tion		mm²	1.5			2.5			6
		AWG	16			14			10
Line fuse		A	10			16 (15) ¹⁾	16	20	35
Nominal input current		A	2.4	4.3	6.1	9.8	14.6	18.1	24.7
OUTPUT									
Recommended motor power		kW	0.75	1.5	2.2	4	5.5	7.5	11
		PS	1	2	3	5.4	7.4	10	15
Output voltage V _{motor}		V	3 × 20 - V _{line}						
Output current		A	2.2	4.1	5.8	9.5	14	18	24
Maximum out- put frequency		Hz	500						
Cross section of motor cable Cu 75C		mm²	1.5			2.5			6
		AWG	16			14			10
Max. motor cable length	Shiel- ded	m	100						
	Un- shiel- ded		150						
GENERAL INFORMATION									
Size			2				3		3 / 4 ²⁾
Heat loss at nominal output power		W	22	45	66	120	165	225	330
Minimum brak- ing resistance value		Ω	68				39		
Tightening tor- que		Nm / lb r.in	1 / 9						1 / 9 (4 / 35) ²⁾
Maximum unit terminal cross section		AWG	8						8 / 6 ²⁾
		mm²	10						10 / 16 ²⁾
Maximum con- trol terminal cross section		AWG	30 – 12						
		mm²	0.05 – 2.5						

1) Recommended values for UL compliance

2) IP20 housing – size 3 / IP55 housing – size 4

Sizes 4 and 5

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3							
Power in kW		15	18.5	22	30	37	
IP55/ NEMA-12K housing	Type	MC LTP-B...	0150-5A3-4-10	0185-5A3-4-10	0220-5A3-4-10	0300-5A3-4-10	0370-5A3-4-10
	Part number		18252044	18252079	18252095	18252125	18252168
INPUT							
Line voltage V _{line} according to EN 50160		V	3 × AC 380 – 480 ±10%				
Line frequency f _{line}		Hz	50 / 60 ±5%				
Recommended power supply cable cross section		mm ²	6	10	16	25	35
		AWG	10	8	6	4	2
Line fuse		A	35	50	63	80	100
Nominal input current		A	30.8	40	47.1	62.8	73.8
OUTPUT							
Recommended motor power		kW	15	18.5	22	30	37
		PS	20	25	30	40	50
Output voltage V _{motor}		V	3 × 20 - V _{line}				
Output current		A	30	39	46	61	72
Maximum output frequency		Hz	500				
Cross section of motor cable Cu 75C		mm ²	6	10	16	25	35
		AWG	10	8	6	4	2
Max. motor cable length	Shielded	m	100				
	Unshielded		150				
GENERAL INFORMATION							
Size			4			5	
Heat loss at nominal output power		W	450	555	660	900	1110
Minimum braking resistance value		Ω	22			12	
Tightening torque		Nm / lb _f .in	4 / 35			15 / 133	
Maximum unit terminal cross section		AWG	6			2	
		mm ²	16			35	
Maximum control terminal cross section		AWG	30 – 12				
		mm ²	0.05 – 2.5				

Size 6

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3						
		Power in kW	45	55	75	90
IP55/ NEMA-12K housing	Type	MC LTP-B...	0450-5A3-4-10	0550-5A3-4-10	0750-5A3-4-10	0900-5A3-4-10
	Part number		18252184	18252214	18252249	18252273
INPUT						
Line voltage V _{line} according to EN 50160		V	3 × AC 380 – 480 ±10%			
Line frequency f _{line}		Hz	50 / 60 ±5%			
Recommended power supply cable cross section		mm ²	50	70	95	120
		AWG	1	2 / 0	3 / 0	4 / 0
Line fuse		A	125	150	200	250
Nominal input current		A	92.2	112.5	153.2	183.7
OUTPUT						
Recommended motor power		kW	45	55	75	90
		PS	60	74	100	120
Output voltage V _{motor}		V	3 × 20 - V _{line}			
Output current		A	90	110	150	180
Maximum output frequency		Hz	500			
Cross section of motor cable Cu 75C		mm ²	50	70	95	120
		AWG	1	2 / 0	3 / 0	4 / 0
Max. motor cable length	Shielded	m	100			
	Unshielded		150			
GENERAL INFORMATION						
Size			6			
Heat loss at nominal output power		W	1350	1650	2250	2700
Minimum braking resistance value		Ω	6			
Tightening torque		Nm / lb _f .in	20 / 177			
Maximum unit terminal cross section		AWG	-			
			M10 stud with nut max. 70 mm ² Press cable lug DIN 46235			
Maximum control terminal cross section		AWG	30 – 12			
		mm ²	0.05 – 2.5			

Size 7

MOVITRAC® LTP-B – EMC filter class C2 according to EN 61800-3					
Power in kW			110	132	160
IP55 / NEMA-12K housing	Type	MC LTP-B...	1100-5A3-4-10	1320-5A3-4-10	1600-5A3-4-10
	Part number		18252303	18252311	18252346
INPUT					
Line voltage V _{line} according to EN 50160		V	3 × AC 380 – 480 ±10%		
Line frequency f _{line}		Hz	50 / 60 ±5%		
Recommended power supply cable cross section	mm ²		120	150	185
	AWG		4 / 0	–	–
Line fuse		A	250	315	355
Nominal input current		A	205.9	244.5	307.8
OUTPUT					
Recommended motor power		kW	110	132	160
		PS	148	177	215
Output voltage V _{motor}		V	3 × 20 - V _{line}		
Output current		A	202	240	302
Maximum output frequency		Hz	500		
Cross section of motor cable Cu 75C	mm ²		120	150	185
	AWG		4 / 0	–	–
Max. motor cable length	Shielded	m	100		
	Unshielded		150		
GENERAL INFORMATION					
Size			7		
Heat loss at nominal output power		W	3300	3960	4800
Minimum braking resistance value		Ω	6		
Tightening torque		Nm / lb _f .in	20 / 177		
Maximum unit terminal cross section		AWG	–		
			M10 stud with nut max. 70 mm ² Press cable lug DIN 46235		
Maximum control terminal cross section	AWG		30 – 12		
	mm ²		0.05 – 2.5		

2.1.4 3-phase system AC 500 – 600 V

Size 2

MOVITRAC® LTP-B – EMC filter class 0 according to EN 61800-3							
Power in kW			0.75	1.5	2.2	4	5.5
IP20/ NEMA-1 housing	Type	MC LTP-B...	0008-603-4-00	0015-603-4-00	0022-603-4-00	0040-603-4-00	0055-603-4-00
	Part number		18251447	18251587	18251714	18410812	18410839
IP55/ NEMA-12K housing	Type	MC LTP-B...	0008-603-4-10	0015-603-4-10	0022-603-4-10	0040-603-4-10	0055-603-4-10
	Part number		18251455	18251595	18410804	18410820	18410847
INPUT							
Line voltage V _{line} according to EN 50160		V	3 × AC 500 – 600 ±10%				
Line frequency f _{line}		Hz	50 / 60 ±5%				
Recommended power supply cable cross section		mm²	1.5				2.5
		AWG	16				14
Line fuse		A	10 / (6) ¹⁾		10		16 / (15) ¹⁾
Nominal input current		A	2.5	3.7	4.9	7.8	10.8
OUTPUT							
Recommended motor power		kW	0.75	1.5	2.2	4	5.5
		PS	1	2	3	5.4	7.4
Output voltage V _{motor}		V	3 × 20 - V _{line}				
Output current		A	2.1	3.1	4.1	6.5	9
Maximum output frequency		Hz	500				
Cross section of motor cable Cu 75C		mm²	1.5				2.5
		AWG	16				14
Max. motor cable length	Shielded	m	100				
	Unshielded		150				
GENERAL INFORMATION							
Size			2				
Heat loss at nominal output power		W	22	45	66	120	165
Minimum braking resistance value		Ω	68				
Tightening torque		Nm / lb _f .in	1 / 9				
Maximum unit terminal cross section	AWG		8				
	mm²		10				
Maximum control terminal cross section	AWG		30 – 12				
	mm²		0.05 – 2.5				

1) Recommended values for UL compliance in parenthesis

Sizes 3 and 4

MOVITRAC® LTP-B – EMC filter class 0 according to EN 61800-3								
Power in kW			7.5	11	15	18.5	22	30
IP20/ NEMA-1 housing	Type	MC LTP-B...	0075-603-4-00	0110-603-4-00	0150-603-4-00	-	-	-
	Part number		18410855	18410863	18410871	-	-	-
IP55/ NEMA-12K housing	Type	MC LTP-B...	0075-603-4-10	0110-603-4-10	0150-603-4-10	0185-603-4-10	0220-603-4-10	0300-603-4-10
	Part number		18251951	18252028	18252052	18410898	18252109	18252133
INPUT								
Line voltage V _{line} according to EN 50160		V	3 × AC 500 – 600 ±10%					
Line frequency f _{line}		Hz	50 / 60 ±5%					
Recommended power supply cable cross section	mm ²		2.5	4	6		10	14
	AWG		14	12	10		8	6
Line fuse	A		20	25 / (30) ¹⁾	35	40 / (45) ¹⁾	50 / (60) ¹⁾	63 / (70) ¹⁾
Nominal input current	A		14.4	20.6	26.7	34	41.2	49.5
OUTPUT								
Recommended motor power	kW		7.5	11	15	18.5	22	30
	PS		10	15	20	25	30	40
Output voltage V _{motor}	V		3 × 20 - V _{line}					
Output current	A		12	17	22	28	34	43
Maximum output frequency	Hz		500					
Cross section of motor cable Cu 75C	mm ²		2.5	4	6		10	14
	AWG		14	12	10		8	6
Max. motor cable length	Shielded	m	100					
	Unshielded		150					
GENERAL INFORMATION								
Size			3		3 / 4 ²⁾	4		
Heat loss at nominal output power	W		225	330	450	555	660	900
Minimum braking resistance value	Ω		39			22		
Tightening torque	Nm / lb _r .in		1 / 9		1 / 9 (4 / 35) ²⁾	4 / 35		
Maximum unit terminal cross section	AWG		8		8 / 6 ²⁾	6		
	mm ²		10		10 / 16 ²⁾	16		
Maximum control terminal cross section	AWG		30 – 12					
	mm ²		0.05 – 2.5					

1) Recommended values for UL compliance in parenthesis

2) IP20 housing: Size 3 / IP55 housing: Size 4

Sizes 5 and 6

MOVITRAC® LTP-B – EMC filter class 0 according to EN 61800-3								
Power in kW			37	45	55	75	90	110
IP55/ NEMA-12K housing	Type	MC LTP-B...	0370-603-4-10	0450-603-4-10	0550-603-4-10	0750-603-4-10	0900-603-4-10	1100-603-4-10
	Part number		18410901	18252192	18252222	18252257	18252281	18410928
INPUT								
Line voltage V _{line} according to EN 50160		V	3 × AC 500 – 600 ±10%					
Line frequency f _{line}		Hz	50 / 60 ±5%					
Recommended power supply cable cross section	mm ²	25	35			50	70	95
	AWG	4	2			1	2 / 0	3 / 0
Line fuse		A	80	100		125 / (150) ¹⁾	160 / (175) ¹⁾	200
Nominal input current		A	62.2	75.8	90.9	108.2	127.7	158.4
OUTPUT								
Recommended motor power	kW	37	45	55	75	90	110	
	PS	50	60	74	100	120	148	
Output voltage V _{motor}		V	3 × 20 - V _{line}					
Output current		A	54	65	78	105	130	150
Maximum output frequency		Hz	500					
Cross section of motor cable Cu 75C	mm ²	25	35			50	70	95
	AWG	4	2			1	2 / 0	3 / 0
Max. motor cable length	Shielded	m	100					
	Unshielded		150					
GENERAL INFORMATION								
Size			5			6		
Heat loss at nominal output power		W	1110	1350	1650	2250	2700	3300
Minimum braking resistance value		Ω	22			12		6
Tightening torque		Nm / lb _f .in	15 / 133			20 / 177		
Maximum unit terminal cross section	AWG		–					
			M10 stud with nut max. 70 mm ² Press cable lug DIN 46235					
Maximum control terminal cross section	AWG		30 – 12					
	mm ²		0.05 – 2.5					

1) Recommended values for UL compliance in parenthesis