

SUGGESTED ELECTRICAL EQUIPMENT FOR THE ELECTRICAL INPUT TO FrigoPack

18.05.2021

Electrical standard	Index. nr.	Supply fuse/ circuit breaker	Accessories		Power supply cable			
					Ambient temperature inside the electrical enclosure			
			Supply choke	Autotransformer for voltage boost	≤ 40 °C		≤ 45 °C	
					Cross section [mm ²]	Installation type	Cross section [mm ²]	Installation type
EN 60204-1/2014	1	10 A	A 5.5NE3+12	A HAT-T400/480+14.5	1.0 B1, --, C, E		1.0 --, --, C, E	
					1.5 B1, B2, C, E		1.5 B1, B2, C, E	
	2	16 A	A 7.5NE3+18	A HAT-T400/480+14.5	1.5 --, --, --, E		2.5 B1, --, C, E	
					2.5 B1, B2, C, E		4 B1, B2, C, E	
	3	20 A	A 11NE3+26	A HAT-T400/480+20.4	2.5 --, --, C, E		4 B1, B2, C, E	
					4 B1, B2, C, E			
	4	25 A	A 11NE3+26	A HAT-T400/480+40.0	4 B1, --, C, E		4 --, --, C, E	
					6 B1, B2, C, E		6 B1, B2, C, E	
	5	32 A	A 11NE3+34	A HAT-T400/480+40.0	6 B1, --, C, E		6 --, --, C, E	
					10 B1, B2, C, E		10 B1, B2, C, E	
	6	40 A	A 22NE3+61	A HAT-T400/480+40.0	10 B1, B2, C, E		10 B1, --, C, E	
							16 B1, B2, C, E	
	7	50 A	A 22NE3+61	A HAT-T400/480+65.0	10 --, --, C, E		16 B1, --, C, E	
				16 B1, B2, C, E		25 B1, B2, C, E		
8	63 A	A 22NE3+61	A HAT-T400/480+65.0	16 --, --, C, E		16 --, --, --, E		
				25 B1, B2, C, E		25 B1, --, C, E		
9	80 A	A 22NE3+84	A HAT-T400/480+105	25 --, --, C, E		35 B1, --, C, E		
				35 B1, B2, C, E		35 B1, B2, C, E		
10	100 A	A 45NE3+110	A HAT-T400/480+105	35 --, --, C, E		50 B1, --, C, E		
				50 B1, B2, C, E		70 B1, B2, C, E		
11	125 A	A 55NE3+143	A HAT-T400/480+130	50 --, --, C, E		70 B1, B2, C, E		
				70 B1, B2, C, E				
12	160 A	A 90NE3+195	A HAT-T400/480+160	70 --, --, C, E		95 B1, --, C, E		
				95 B1, --, C, E		120 B1, B2, C, E		
13	200 A	A 110NE3+247	-	120 B1, --, C, E		120 --, --, C, E		
DIN VDE 0298-4/1998	14	250 A	A 132NE3+297	-	Please contact KIMO RHVAC Controls		Please contact KIMO RHVAC Controls	
	15	400 A	-	-				
	16	1000 A	-	-				

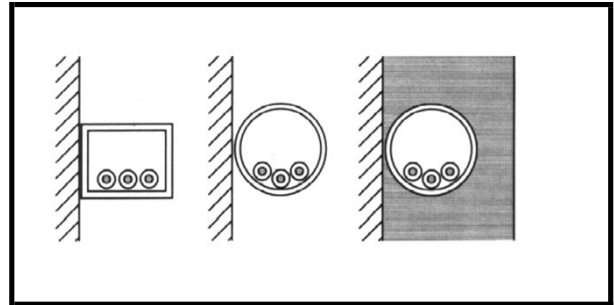
SUGGESTED ELECTRICAL EQUIPMENT FOR THE MOTOR OUTPUT FROM FrigoPack

18.05.2021

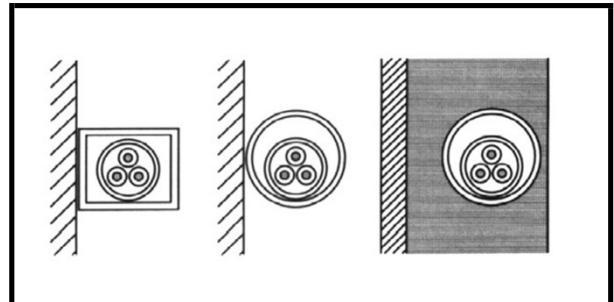
Electrical standard	Index. nr.	Max. motor current	Accessories		Safety contactor		Cooling air required						Motor cable					
			Motor choke	Motor filter	Normal P _{AC23} / I _{AC23} /I _{AC1}	Using FrigoModul P _{AC23} / I _{AC23} /I _{AC1}	Ambient temperature outside the electrical enclosure						Ambient temperature inside the electrical enclosure					
							≤ 30 °C			≤ 35 °C			≤ 40 °C		≤ 45 °C			
							FP F (Freq. Inverter)	FP S (Soft Starter)		FP F (Freq. Inverter)	FP S (Soft Starter)		Cross section	Installation type	Cross section	Installation type		
[m³/h]	Without	With	[m³/h]	Without	With	[mm²]	[mm²]											
EN 60204-1/2014	18	0 A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	19	0 A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	20	0 A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21	5,10 A	A 3.0NE3+8	A 2.2PE+5.5	3 kW / 7/16 A	3 kW / 7/16 A	22	4	1	33	6	2	1.0	B1,B2,C,E	1.0	B1,B2,C,E		
	22	5,60 A	A 3.0NE3+8	A 2.2PE+5.5	3 kW / 7/16 A	3 kW / 7/16 A	24	4	1	35	6	2	1.0	B1,B2,C,E	1.0	B1,B2,C,E		
	23	6,20 A	A 3.0NE3+8	A 4.0PE+10	3 kW / 7/16 A	3 kW / 7/16 A	26	4	1	39	7	2	1.0	B1,B2,C,E	1.0	B1,B2,C,E		
	24	6,80 A	A 3.0NE3+8	A 4.0PE+10	3 kW / 7/16 A	3 kW / 7/16 A	28	5	1	42	7	2	1.0	B1,B2,C,E	1.0	B1,B2,C,E		
	25	7,50 A	A 5.5NE3+12	A 4.0PE+10	4 kW / 9/35 A	3 kW / 7/16 A	30	5	1	45	8	2	1.0	B1,B2,C,E	1.0	B1,B2,C,E		
	26	8,20 A	A 5.5NE3+12	A 4.0PE+10	4 kW / 9/35 A	3 kW / 7/16 A	33	6	1	49	9	2	1.0	B1,B2,C,E	1.0	B1,B2,C,E		
	27	9,10 A	A 5.5NE3+12	A 4.0PE+10	5.5 kW / 12/35 A	3 kW / 7/16 A	36	7	1	54	10	2	1.0	B1,B2,C,E		B1,B2,C,E		
	28	10,00 A	A 7.5NE3+18	A 4.0PE+10	5.5 kW / 12/35 A	3 kW / 7/16 A	39	7	1	58	11	2	1.0	B1,--,C,E	1.0	--,--,C,E		
	29	11,00 A	A 7.5NE3+18	A 7.5PE+16	5.5 kW / 12/35 A	3 kW / 7/16 A	42	8	1	63	12	2	1.5	B1,B2,C,E	1.5	B1,B2,C,E		
	30	12,00 A	A 7.5NE3+18	A 7.5PE+16	5.5 kW / 12/35 A	3 kW / 7/16 A	46	9	1	68	13	2	1.5	B1,B2,C,E	1.5	B1,--,C,E		
	31	13,00 A	A 7.5NE3+18	A 7.5PE+16	7.5 kW / 17/35 A	3 kW / 7/16 A	49	9	1	73	14	2	1.5	B1,--,C,E	1.5	--,--,C,E		
	32	15,00 A	A 11NE3+26	A 7.5PE+16	7.5 kW / 17/35 A	3 kW / 7/16 A	55	11	1	83	16	2	2.5	B1,B2,C,E	2.5	B1,--,C,E		
	33	16,00 A	A 11NE3+26	A 7.5PE+16	7.5 kW / 17/35 A	4 kW / 9/35 A	59	12	1	88	17	2	2.5	B1,B2,C,E	4	B1,B2,C,E		
	34	18,00 A	A 11NE3+26	A 11PE+24	11 kW / 25/35 A	4 kW / 9/35 A	65	13	1	98	20	2	2.5	B1,--,C,E	2.5	B1,--,C,E		
	35	20,0 A	A 11NE3+26	A 11PE+24	11 kW / 25/35 A	4 kW / 9/35 A	72	14	1	107	22	2	4	B1,B2,C,E	4	B1,B2,C,E		
	36	22,0 A	A 11NE3+26	A 11PE+24	11 kW / 25/35 A	4 kW / 9/35 A	78	16	1	117	24	2	4	B1,B2,C,E	4	B1,--,C,E		
	37	24,0 A	A 15NE3+34	A 11PE+24	11 kW / 25/35 A	4 kW / 9/35 A	84	17	1	126	26	2	4	B1,--,C,E	4	--,--,C,E		
	38	27,0 A	A 15NE3+34	A 15PE+32	15 kW / 32/45 A	4 kW / 9/35 A	93	20	1	140	29	2	6	B1,B2,C,E	6	B1,B2,C,E		
	39	30,0 A	A 22NE3+61	A 15PE+32	15 kW / 32/45 A	4 kW / 9/35 A	102	22	1	153	33	2	6	B1,--,C,E	6	B1,--,C,E		
	40	33,0 A	A 22NE3+61	A 15PE+32	18.5 kW / 40/55 A	4 kW / 9/35 A	111	24	1	166	36	2	10	B1,B2,C,E	10	B1,B2,C,E		
	41	36,0 A	A 22NE3+61	A 18.5PE+48	18.5 kW / 40/55 A	15 kW / 32/45 A	120	26	1	179	39	2	10	B1,B2,C,E	10	B1,B2,C,E		
	42	39,0 A	A 22NE3+61	A 18.5PE+48	18.5 kW / 40/55 A	15 kW / 32/45 A	128	28	1	192	42	2	16	B1,B2,C,E	16	B1,B2,C,E		
	43	43,0 A	A 22NE3+61	A 18.5PE+48	22 kW / 50/55 A	15 kW / 32/45 A	139	31	1	209	47	2	16	B1,--,C,E	16	B1,B2,C,E		
	44	47,0 A	A 22NE3+61	A 18.5PE+48	22 kW / 50/55 A	18.5 kW / 40/55 A	150	34	1	225	51	2	16	B1,B2,C,E	16	B1,B2,C,E		
	45	51,0 A	A 22NE3+61	-	30 kW / 65/90 A	18.5 kW / 40/55 A	161	37	1	242	55	2	16	B1,--,C,E	16	B1,--,C,E		
	46	56,0 A	A 37NE3+84	-	30 kW / 65/90 A	30 kW / 65/90 A	174	41	1	261	61	2	25	B1,--,C,E	25	B1,--,C,E		
	47	62,0 A	A 37NE3+84	-	30 kW / 65/90 A	30 kW / 65/90 A	190	45	1	285	67	2	25	B1,B2,C,E	25	B1,B2,C,E		
	48	68,0 A	A 37NE3+84	-	37 kW / 80/100 A	30 kW / 65/90 A	205	49	1	308	74	2	35	B1,B2,C,E	35	B1,B2,C,E		
	49	75,0 A	A 37NE3+84	-	37 kW / 80/100 A	30 kW / 65/90 A	223	54	1	334	81	2	35	B1,B2,C,E	35	B1,B2,C,E		
	50	82,0 A	A 45NE3+110	-	45 kW / 95/100 A	30 kW / 65/90 A	240	59	1	359	89	2	50	--,--,C,E	50	--,--,C,E		
	51	91,0 A	A 45NE3+110	-	45 kW / 95/100 A	37 kW / 80/100 A	261	66	1	392	99	2	50	--,--,C,E	50	--,--,C,E		
	52	100,0 A	A 45NE3+110	-	55 kW / 115/140 A	37 kW / 80/100 A	282	72	1	424	109	2	50	--,--,C,E	50	--,--,C,E		
	53	110,0 A	A 55NE3+143	-	55 kW / 115/140 A	55 kW / 115/140 A	305	80	1	458	119	2	50	--,--,C,E	50	--,--,C,E		
	54	120,0 A	A 55NE3+143	-	75 kW / 150/160 A	55 kW / 115/140 A	328	87	1	492	130	2	70	--,--,C,E	70	--,--,C,E		
	55	130,0 A	A 90NE3+195	-	75 kW / 150/160 A	55 kW / 115/140 A	350	94	1	525	141	2	70	--,--,C,E	70	--,--,C,E		
	56	150,0 A	A 90NE3+195	-	75 kW / 150/160 A	75 kW / 150/160 A	394	109	1	591	163	2	95	--,--,C,E	95	--,--,C,E		
	57	160,0 A	A 90NE3+195	-	90 kW / 185/185 A	75 kW / 150/160 A	415	116	1	623	174	2	95	--,--,C,E	95	--,--,C,E		
	58	180,0 A	A 110NE3+247	-	90 kW / 185/185 A	90 kW / 185/185 A	458	130	1	687	195	2	95	--,--,C,E	120	--,--,C,E		
	59	200 A	A 110NE3+247	-	110 kW / 225/250 A	110 kW / 225/250 A	499	145	1	749	217	2	120	--,--,C,E	120	--,--,C,E		
	60	220 A	A 110NE3+247	-	110 kW / 225/250 A	110 kW / 225/250 A	540	159	1	811	239	2	120	--,--,C,E	150	--,--,C,E		
	DIN VDE 0298-4/1998	61	240 A	-	-	132 kW / 265/300 A	110 kW / 225/250 A	581	174	1	872	260	2	150	--,--,C,E	150	--,--,C,E	
		62	270 A	-	-	160 kW / 300/300 A	132 kW / 265/300 A	641	195	1	962	293	2	185	--,--,C,E	185	--,--,C,E	
		63	300 A	-	-	160 kW / 300/300 A	132 kW / 265/300 A	701	217	1	1051	326	2	185	--,--,C,E	240	--,--,C,E	
		64	330 A	-	-	200 kW / 400/400 A	200 kW / 400/400 A	760	239	1	1140	358	2	240	--,--,C,E	240	--,--,C,E	
		65	360 A	-	-	200 kW / 400/400 A	200 kW / 400/400 A	818	260	1	1228	391	2	300	--,--,C,E	300	--,--,C,E	
		66	390 A	-	-	200 kW / 400/400 A	200 kW / 400/400 A	877	282	1	1315	423	2	300	--,--,C,E	300	--,--,C,E	
		67	430 A	-	-	250 kW / 500/550 A	250 kW / 500/550 A	954	311	1	1431	467	2	300	--,--,C,E		Please contact KIMO RHVAC Controls	
		68	470 A	-	-	250 kW / 500/550 A	250 kW / 500/550 A	1031	340	1	1546	510	2		Please contact KIMO RHVAC Controls		Please contact KIMO RHVAC Controls	

Types of cable installation

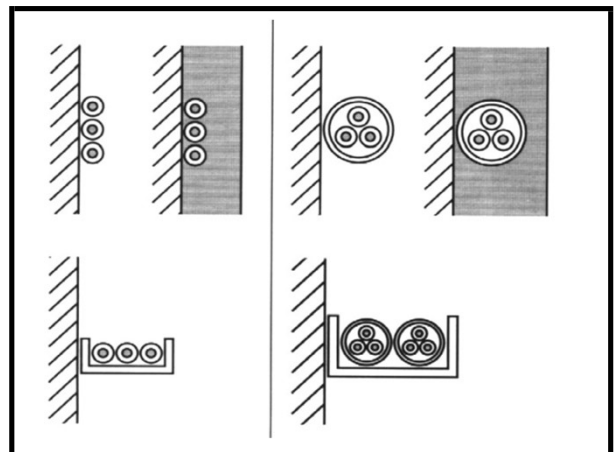
B1: Round conduit or rectangular cable trunking with three separate single-core current-carrying conductors



B2: Round conduit or rectangular cable trunking with three current-carrying conductors in a multi-core cable



C: Wall mount of three current-carrying conductors (single or multi core)



E: Free-air mount e.g. on cable bridges with three current-carrying conductors in a multi-core cable

