

Lönne brake motors



Rev. 01



www.lonne.com

Keeps your machinery running!

1TZ9 Brakemotors frame 180 to 315

4 poles, Duty S2-30min, Voltages 380V-50Hz / 440V-60Hz / (Duty S1, with ventilation)

MOTORTYPE	U	f	P S1	P S2	n	n	cos ϕ	I _n	M _n	Ma/Mn	Ia/I _n	Mk/Mn	J	M
	V	Hz	kW	kW	RPM	%		A	Nm				Kgm2	kg
14BL183-4AA99-Z 1PC3 180-4	380 440	50 60	18,5 21,3	21 24	1464 1764	89,6 90,3	0,83 0,84	43,5 42	137 130	2,2 2,2	6,3 6,4	2,8 2,9	0,099	140
14BL186-4AA99-Z 1PC3 180-4	380 440	50 60	22 25,3	24 27	1466 1766	90,2 91,5	0,82 0,83	49,5 46,5	156 146	2,6 2,7	6,6 6,9	3,2 3,4	0,117	155
14BL207-4AA99-Z 1PC3 200-4	380 440	50 60	30 34,5	33 37	1466 1766	90,9 91,9	0,82 0,83	67 64	215 200	2,6 2,6	6,6 7,1	3,2 3,6	0,191	205
14BL220-4AA99-Z 1PC3 225-4	380 440	50 60	37 42,5	44 49	1474 1774	91,7 92,8	0,86 0,86	85 67	285 264	2,1 2,3	6,0 6,3	2,7 2,8	0,374	265
14BL223-4AA99-Z 1PC3 225-4	380 440	50 60	45 52	52 58	1474 1774	92,4 93,2	0,86 0,86	100 95	337 312	2,6 2,7	6,7 7,0	3,0 3,1	0,447	300
14BL253-4AA99-Z 1PC3 250-4	380 440	50 60	55 63	65 73	1478 1778	92,8 93,3	0,84 0,84	126 122	420 392	2,3 2,4	5,6 5,9	2,5 2,6	0,688	390
14BL258-4AA99-Z 1PC3 250-4	380 440	50 60	75 86	97 111	1478 1778	93,2 94,2	0,87 0,87	182 176	627 596	1,9 1,9	5,4 5,4	2,5 2,3	0,856	460
14BL280-4AA99-Z 1PC3 280-4	380 440	50 60	75 86	90 100	1486 1786	93,4 94,1	0,82 0,83	180 170	578 535	2,3 2,4	6,7 7,1	3,0 3,1	1,19	535
14BL283-4AA99-Z 1PC3 280-4	380 440	50 60	90 104	107 122	1485 1785	94,1 94,8	0,85 0,86	205 198	688 653	2,3 2,4	6,9 7,2	2,9 2,9	1,39	580
14BL288-4AA99-Z 1PC3 280-4	380 440	50 60	110 127	137 152	1486 1786	94,4 94,9	0,82 0,82	265 250	880 813	2,4 2,5	6,8 7,2	2,9 3,1	1,71	680
14BL310-4AA99-Z 1PC3 300-4	380 440	50 60	110 127	136 152	1486 1786	94,0 94,4	0,84 0,84	260 250	876 813	2,1 2,2	5,5 5,9	2,4 2,4	1,94	730
14BL313-4AA99-Z 1PC3 300-4	380 440	50 60	132 152	169 181	1486 1786	94,9 95,3	0,86 0,86	315 290	1086 968	2,3 2,5	5,6 6,2	2,4 2,5	2,31	810
14BL316-4AA99-Z 1PC3 300-4	380 440	50 60	160 184	207 229	1484 1784	95,1 95,5	0,87 0,87	380 360	1332 1226	2,2 2,5	5,5 5,9	2,2 2,3	2,88	955
14BL317-4AA99-Z 1PC3 300-4	380 440	50 60	200 230	245 270	1486 4786	95,6 96,0	0,88 0,87	445 420	1574 1444	2,0 2,2	5,5 5,9	2,3 2,3	3,46	1060
14BL318-4AA99-Z 1PC3 300-4	380 440	50 60	250 288	300 335	1488 1788	95,7 96,1	0,84 0,85	555 530	1925 1789	3,0 3,2	7,2 7,4	3,1 3,1	4,22	1290

Temperature rise 90 degrees, F-insulation, + - 10% Un, IP 56, ambient temperature from - 20°C to + 45 °C.

PLEM deployment frame used on "Ormen Lange Mid North" Project. Lönne scope of delivery:

Complete drive system including electrical motors, gear boxes, frequency inverters and control system.



1TZ9 Brakemotors frame 180 to 315

6 poles, Duty S2-30min, Voltages 380V-50Hz / 440V-60Hz (Duty S1, with ventilation)

MOTORTYPE	U	f	P S1	P S2	n	n	cos φ	In	Mn	Ma/Mn	Ia/In	Mk/Mn	J	m
	V	Hz	kW	kW	RPM	%		A	Nm				kgm2	kg
14BL186-6AA99-Z 1PC3 180-6	380 440	50 60	15 18	18,5 21,3	962 1162	87,1 89,1	0,84 0,85	38,5 37,5	184 175	2,0 2,1	4,4 4,8	2,2 2,2	0,175	150
14BL206-6AA99-Z 1PC3 200-6	380 440	50 60	18,5 22	23 26,1	972 1172	88,6 90,1	0,82 0,82	48,5 46	226 213	1,9 2,1	4,6 5,1	2,0 2,1	0,238	195
14BL207-6AA99-Z 1PC3 200-6	380 440	50 60	22 26,5	26,9 31	970 1170	89,1 90,2	0,82 0,82	56 54	265 253	2,1 2,1	4,7 5,0	2,1 2,1	0,287	205
14BL223-6AA99-Z 1PC3 225-6	380 440	50 60	30 36	35 41	976 1176	90,9 92,1	0,83 0,84	71 58	342 333	2,5 2,5	5,0 5,6	2,2 2,2	0,492	280
14BL253-6AA99-Z 1PC3 250-6	380 440	50 60	37 44,5	44 53	980 1180	91,6 92,3	0,83 0,83	88 90	429 429	2,5 2,5	5,4 5,4	2,1 2,0	0,762	370
14BL258-6AA99-Z 1PC3 250-6	380 440	50 60	45 54	56 65	980 1180	92,2 93,1	0,8 0,83	110 110	546 526	2,4 2,4	5,2 5,2	2,0 1,9	0,934	405
14BL280-6AA99-Z 1PC3 280-6	380 440	50 60	45 54	56,5 65	982 1182	91,5 92,5	0,9 0,85	110 108	549 525	2,0 2,1	4,9 5,3	1,9 1,9	1,12	475
14BL283-6AA99-Z 1PC3 280-6	380 440	50 60	55 66	64 74	984 1184	92,3 92,9	0,86 0,86	124 122	621 597	2,4 2,5	5,8 5,8	2,2 2,2	1,37	510
14BL288-6AA99-Z 1PC3 280-6	380 440	50 60	75 90	88 100	984 1184	93,3 94,1	0,85 0,86	170 164	854 807	2,7 3,1	6,0 6,2	2,4 2,5	1,65	570
14BL310-6AA99-Z 1PC3 300-6	380 440	50 60	75 90	98 109	986 1186	92,8 93,4	0,86 0,86	192 182	949 878	2,0 2,2	5,2 5,6	2,2 2,3	2,1	685
14BL313-6AA99-Z 1PC3 300-6	380 440	50 60	90 108	112 126	986 1186	93,3 94,0	0,85 0,85	215 210	1085 1015	2,3 2,4	5,8 6,0	2,4 2,5	2,5	750
14BL316-6AA99-Z 1PC3 300-6	380 440	50 60	110 132	141 159	986 1186	93,6 94,2	0,87 0,87	265 255	1366 1280	2,2 2,2	5,6 6,1	2,3 2,3	3,2	890
14BL317-6AA99-Z 1PC3 300-6	380 440	50 60	132 158	178 196	986 1186	94,1 94,8	0,87 0,87	335 315	1724 1578	2,5 2,5	5,7 6,2	2,4 2,4	4,02	980
14BL318-6AA99-Z 1PC3 300-6	380 440	50 60	160 192	221 241	986 1186	94,1 94,6	0,88 0,88	415 385	2140 1940	2,3 2,4	5,5 6,2	2,2 2,5	4,71	1180

Temperature rise 90 degrees, F-insulation, + - 10% Un, IP 56, ambient temperature from - 20°C to + 45 °C.

Harding safety prototype: Complete control system for electric winch in ATEX environment.

Lönne scope of delivery: container "plug and play" with 2x idrives, control system and brake resistors.



1TZ9 Brakemotors frame 180 to 315

4 poles, Duty S2-30min, Voltages 660V-50Hz / 690V-60Hz (Duty S1, with ventilation)

MOTORTYPE	U	f	P S1	P S2	n	η	$\cos \phi$	I _n	M _n	Ma/Mn	Ia/I _n	Mk/Mn	J	m
	V	Hz	kW	kW	RPM	%		A	Nm				kgm ²	kg
16BL183-4PM99-Z	660	50	18,5	24	1466	90,9	0,84	27	156	1,9	5,1	2,3	0,122	155
16BL186-4PM99-Z	660	50	22	30,5	1464	91,3	0,85	34	199	1,9	5,0	2,3	0,144	180
16BL207-4PM99-Z	660	50	30	38,5	1466	92,0	0,86	42,5	251	2,0	5,4	2,6	0,234	225
16BL220-4PM99-Z	660	50	37	47	1478	93,0	0,86	51	304	2,2	5,5	2,4	0,398	290
16BL223-4PM99-Z	660	50	45	61	1478	93,4	0,86	66	394	2,2	5,4	2,3	0,486	330
16BL253-4PM99-Z	660	50	55	82	1482	94,1	0,88	87	528	1,9	5,8	2,3	0,856	460
16BL258-4PM99-Z	660	50	75	97	1480	94,2	0,88	102	626	1,8	5,6	2,3	0,99	495
16BL280-4PM99-Z	660	50	75	102	1482	94,5	0,87	108	657	1,8	5,4	2,1	1,39	575
16BL283-4PM99-Z	660	50	90	129	1484	94,7	0,87	136	830	1,8	5,4	2,3	1,71	675
16BL288-4PM99-Z	660	50	110	148	1484	95,0	0,87	156	952	2,1	6,0	2,6	1,88	710
16BL310-4PM99-Z	660	50	110	157	1486	95,3	0,88	166	1009	2,2	5,6	2,2	2,31	810
16BL313-4PM99-Z	660	50	132	194	1486	95,4	0,89	205	1247	2,0	5,2	2,1	2,88	965
16BL316-4PM99-Z	660	50	160	224	1488	95,5	0,89	230	1438	2,2	5,6	2,2	3,46	1105
16BL317-4PM99-Z	660	50	200	286	1488	95,8	0,88	295	1835	2,3	5,6	2,3	4,22	1305
16BL318-4PM99-Z	660	50	250	328	1486	95,8	0,88	340	2108	2,5	6,2	2,3	4,50	1345

Temperature rise 90 degrees, F-insulation for frequency converter operation up to 690 VY,
+ - 10% Un, IP 56, ambient temperature from - 20°C to + 45 °C.

Brakemotors frame 180 to 315

4 poles, Duty S2-30min, Voltages 660V-50Hz / 690V-60Hz (Duty S1, with ventilation)

MOTORTYPE	U	f	P S1	P S2	n	η	$\cos \phi$	I _n	M _n	Ma/Mn	Ia/I _n	Mk/Mn	J	m
	V	Hz	kW	kW	RPM	%		A	Nm				kgm ²	kg
16BL186-6PM99-Z	660	50	15	20,5	970	87,5	0,82	24,5	202	1,8	3,9	1,8	0,203	175
16BL206-6PM99-Z	660	50	18,5	24,5	972	88,4	0,82	29,5	241	1,7	4,1	1,8	0,285	210
16BL207-6PM99-Z	660	50	22	30	972	89,0	0,83	35	295	1,7	4,0	1,8	0,362	240
16BL223-6PM99-Z	660	50	30	43	975	90,7	0,85	49	421	1,9	4,4	2,0	0,629	325
16BL253-6PM99-Z	660	50	37	52,5	980	91,8	0,84	59	512	2,2	4,7	1,8	0,934	405
16BL258-6PM99-Z	660	50	45	56	982	92,3	0,84	63	545	2,4	5,3	2,0	1,07	435
16BL280-6PM99-Z	660	50	45	66	984	92,7	0,87	72	641	2,2	4,8	1,8	1,37	520
16BL283-6PM99-Z	660	50	55	76	984	92,9	0,87	83	738	2,4	5,1	2,0	1,65	570
16BL288-6PM99-Z	660	50	75	85	986	93,8	0,85	93	823	3,1	6,7	2,6	1,94	615
16BL310-6PM99-Z	660	50	75	110	986	93,7	0,86	122	1065	2,1	5,1	2,1	2,50	760
16BL313-6PM99-Z	660	50	90	133	986	93,9	0,87	144	1288	2,0	5,0	2,0	3,20	735
16BL316-6PM99-Z	660	50	110	160	986	94,1	0,87	172	1550	2,1	5,0	2,0	4,02	1010
16BL317-6PM99-Z	660	50	132	204	988	94,5	0,87	220	1972	2,2	5,3	2,1	4,71	1180
16BL318-6PM99-Z	660	50	160	231	988	94,6	0,88	245	2233	2,3	5,4	2,2	5,39	1245

Temperature rise 90 degrees, F-insulation for frequency converter operation up to 690 VY,
+ - 10% Un, IP 56, ambient temperature from - 20°C to + 45 °C.

Expertise in motion

Complete program of marine brake motors. Lönne iDrive frequency inverters for 690V.

Tailor made for the nordic environment!



Type approvals brakes

Application area:

For many years a seawaterproof version of the SFB series has been used successfully on winch motors in ship building and as a safety, service or holding brake in wharf crane installations. Other application areas are its use in travelling, trolley and hoisting gear in crane construction, as well as in roller mills, smelters and off-shore installations in machine construction.

Special features brakes:

- A series of 63 to 10000 Nm
- Strong magnetic circuit for bridging of a large air gap.
Large wear reserve
- One-time readjustment of the brakes over the entire wearing area
Simple readjustment without adjusting
Minimum maintenance times
- Brake remains fully functional when housing is removed
Can be inspected very easily, even during operation
Problem-free maintenance without dismantling of brake
Large cost-saving
- Deceleration from high rotational speed -
large work capacity
Safety reserve for emergency stop
- Protection class IP 67, submersible
Optimally suited to use on ships and in wharf crane installations as well as for industrial applications
- Can be mounted horizontally or vertically without any additional measures
- Manual emergency release is standard
- Special equipment
 - Microswitch
 - Inductive proximity switch
 - Space heater
 - Quick-break switching devices, controlling devices and rectifiers

Mode of function:

When the brake current is switched on, an electromagnetic field is built up and the spring tension of the brake is overcome. The corresponding sub-assemblies including the motor shaft can rotate freely. The brake is released. When the brake current is switched off or if a power failure occurs, the brake's electromagnetic field collapses. The mechanical brake action is transferred to the motor shaft. The motor is braked. PINTSCH BUBENZER ensures the required safety.

Certificates of all relevant classification societies

- Germanischer Lloyd
- Lloyd's Register of Shipping
- Det Norske Veritas
- Bureau Veritas
- American Bureau of Shipping
- Maritime Register of Shipping
(with type-specific acceptance testing)



Lönne solutions



Lönne scope of delivery: 18 applications for winch drives on M.S prestfjord.

Brake torque

Available braking torques in nm								
Motorframe	160	250	400	630	1000	1600	2500	4000
160	x	x	x					
200		x	x	x				
225			x	x	x			
250			x	x	x			
280				x	x	x		
315					x	x	x	
355					x	x	x	x

All motors in the brochure will be adapted with springloaded brakes according to the necessary braketorque. The brakes are double-disc operated by springs when the motor is switched off.

All braketorques can be increased up with 30%. Used as holding brake only, braketorque can be increased up with 60% (special catalouge). All brakes in 110 VDC or 205 VDC.

Lönne solutions



Lönne scope of delivery: Brake motor for winch drives on G.O Sars.

Flame proof motors with brake



Brammer Group plc

Brammer is the leading European supplier of quality industrial maintenance, repair and overhaul products ("MRO")

- Employs more than 3,500 people
- Including more than 1,000 technical specialists
- Offering added value technical expertise
- Present in 20 countries across Europe
- More than 350 locations
- Supplying over 100,000 customers

Brammer is highly specialized in analyzing the customers' manufacturing processes and to find areas for significant cost savings.

In 2013 we delivered £60 million of signed-off cost savings to our customers. In the past 10 years we have saved our customers £244 million.

For many of these customers, we operate a Brammer Insite™ in the plant. This enables us to offer an in-depth understanding of the customer's needs and issues such as:

- Minimizing downtime,
- Driving improvements in productivity and energy consumption,
- Addressing continuous improvement programs
- Health & Safety.

Brammer Added Value Services

Brammer extensive range of added value services are categorized in four main points:

1. The extensive portfolio of mechanical MRO products available – from bearings to belts, from seals to chain, from motors to gearboxes and frequency inverters;
2. The way in which Brammer modifies and adapts these products ensure that the customers' specific needs can be addressed;
3. The business processes by which Brammer can assist the customers improve their internal efficiencies.
4. The organisation solutions through which Brammer can assist the customers, manage more effectively their mechanical MRO requirements.

Brammer Value Proposition

Brammer value proposition defines three major goals that are defined in close cooperation with the customer:

- Reduce total acquisition costs
- Improve production efficiency
- Reduce working capital

Brammer in The Nordic Region

Since January 2014, Lönne became part of Brammer Group plc. Lönne is highly recognized as a specialist within drive solutions for rotating machinery. As part of the Brammer Group, Lönne will benefit from Brammer's pan-european distribution network and wide product scale. The central warehouse is placed in Helsingborg, with several express warehouses spread out in the Nordic region.

To utilize the Brammer Lönne expertise in the Nordic area, we will continuously accomplish acquisitions of more local MRO specialists such as Backlund & Burman, CCH TransTech, Elektro Motor, KIPAB and Röstberg & Bengtsson in Sweden.

Follow us on www.lonne.com to see the development.

