SECTION 2

Motor Information for Treated Effluent Lift Pump A/B

00GNB59AP101
00GNB60AP101

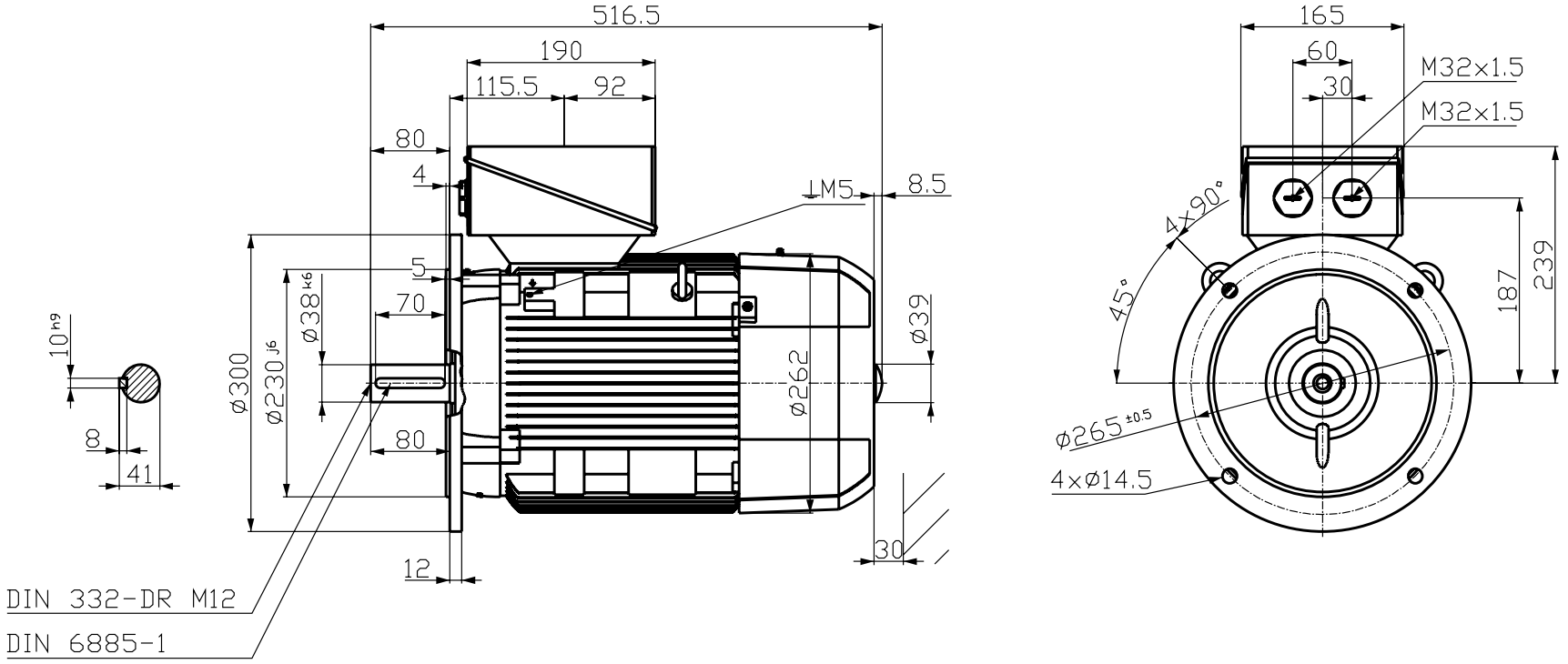
Motor Data sheets

1. Name of motor	-	TREATED EFFLUENT LIFT PUMP MOTORS
2. Manufacturer	-	SIEMENS
3. Country of origin	-	EUROPE
4. Type/machine code	-	SQUIRREL CAGE INDUCTION
5. Applied standard (characteristics)	-	IEC 60034-1
6. Ratings		
(1) Rated output	kW	7.5
(2) Service factor	-	1
(3) Number of pole	-	2
(4) Rated speed	min^{-1}	2950
(5) Rated voltage	V	380
(6) Number of phases	-	3
(7) Rated frequency	Hz	50
(8) Insulation class	-	F
(9) Temperature rise	-	B
(10) Rated duty	-	S1
7. Service Conditions		
(1) Starting method	-	DOL
(2) Direction of rotation (viewed from DE)	-	CW
(3) Reverse rotation (Yes / No)	-	NO
(4) Location (Indoor / Outdoor)	-	OUTDOOR
(5) Enclosure IP rating		
(a) Motor frame	-	IP55
(b) Terminal boxes	-	IP55
(6) Installation (Horizontal / Vertical)	-	VERTICAL
(7) Design ambient temperature	ºC	-20 to 40
(8) Explosion proof (Required / Not required)	-	NOT REQUIRED
(9) Noise level (at full-load condition)	dB (A)	72
8. Characteristics		
(1) Current		
(a) Normal current	A	15.97
(b) No-load current	A	
(c) Starting current	A	<650% rated current

(2) Torque		
(a) Starting torque	%	220
(b) Maximum torque	%	310
(3) Slip at rated output		0.0167
(4) Efficiencies		
(a) At 100% load	%	88.1
(b) At 75% load	%	88.5
(c) At 50% load	%	87.6
(d) At 25% load	%	-
(5) Power factor		
(a) At rated load	%	81
(b) At starting load	%	
(6) GD2 coupled with driven equipment	kg-m^2	0.024
(7) Starting time with driven equipment	s	< 5
(8) Consecutive number of starts		
(a) From cold condition per hour	-	3
(b) From hot condition per hour	-	2
(c) Minimum time between 2 starts (running state)	min	
(d) Minimum time between 2 starts (stop state)	min	
(9) Allowable locked-rotor time		
(a) At cold condition	s	
(b) At hot condition	s	
9. Constructions		
(1) Stator winding connection (Wye / Delta)	-	DELTA
(2) Type of bearing (DE / NDE)	-	6208 2Z C3 / 6208 2Z C3
(3) Lubricants		
(a) Recommended lubricant and brand name	-	ESSO UNIREX N3
(b) Pouring method	-	GREASE GUN
(c) Quantity of lubricant for initial filling	-	40g (DE) / 40g (NDE)
(d) Recommended interval for recharging	-	8000 HOURS
(e) Recharging quantity	-	10g (DE) / 10g (NDE)
(f) Location of pouring (indicated in the outline drawing)	-	GREASE NIPPLE
(4) Bearing cooling water requirement (if required)		NOT REQUIRED
(a) Quantity	m^3/h	-
(b) Inlet water temperature	°C	-
(c) Required cooling water pressure	kPa	-
(d) Type of cooling water	-	-

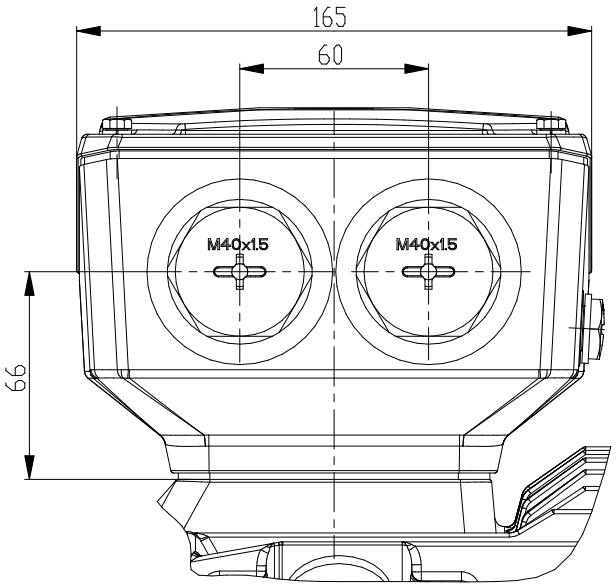
(5) Water to air heat exchanger (if applied)	m^3/h	NOT APPLIED
(a) Quantity of cooling water	°C	-
(b) Inlet water temperature	kPa	-
(c) Required cooling water pressure	-	-
(d) Type of cooling water	-	-
(6) Space heater (AC 220V 1 phase)	W	NOT APPLICABLE
(7) Weight	kg	61
10. Attached document numbers		SEE PAGE 14 TO 18
(1) Motor outline drawing	-	
(2) Terminal box drawings		
(a) For main power	-	
(b) For instruments	-	
(c) For space heater	-	
(3) Current transformers (for MV motors only)		
(a) Characteristics curves	-	
(b) Outline drawing	-	
(4) Efficiency curves	-	
(5) Thermal capability curves		
(a) At cold condition	-	
(b) At hot condition	-	
(6) Starting and speed torque characteristics at 80%, 90% and 100% voltage	-	

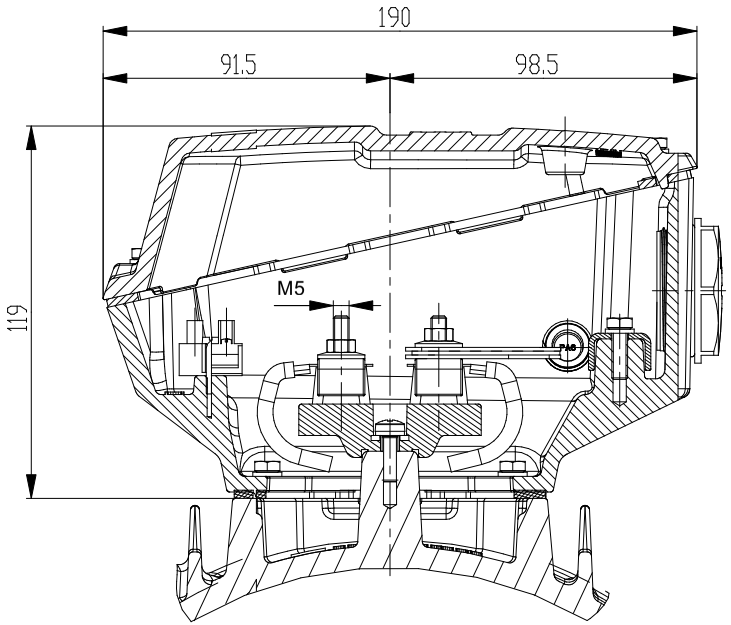
10.1 MOTOR OUTLINE DRAWING

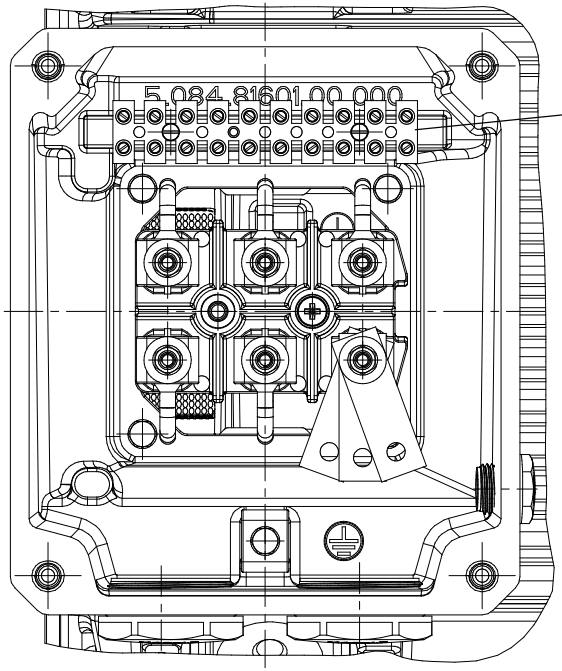


Tolerance	Surface	Material	Weight: -	Scale: mm
1LE1501-1CA69-0GA4-Z L23+M1Y+N30+R10+R50+S01+S05	Author Creator: DTK Approval Department Change Order	Dimensional drawing Maßzeichnung		
SIEMENS	Doc State: 2/21/17 Revision: Index: RS	MLFB Item No Doc No	Doc Type: / Paper Size: A3 1st Language: en 2nd Language: de	
© Siemens AG 2016	Project No: -	Ref No: -	Sheet: 1 of 1	

Massbild unverbindlich. Aenderungen konstruktiver Einzelheiten vorbehalten.
Dimension drawing subject to change. We reserve the right to change constructional details.



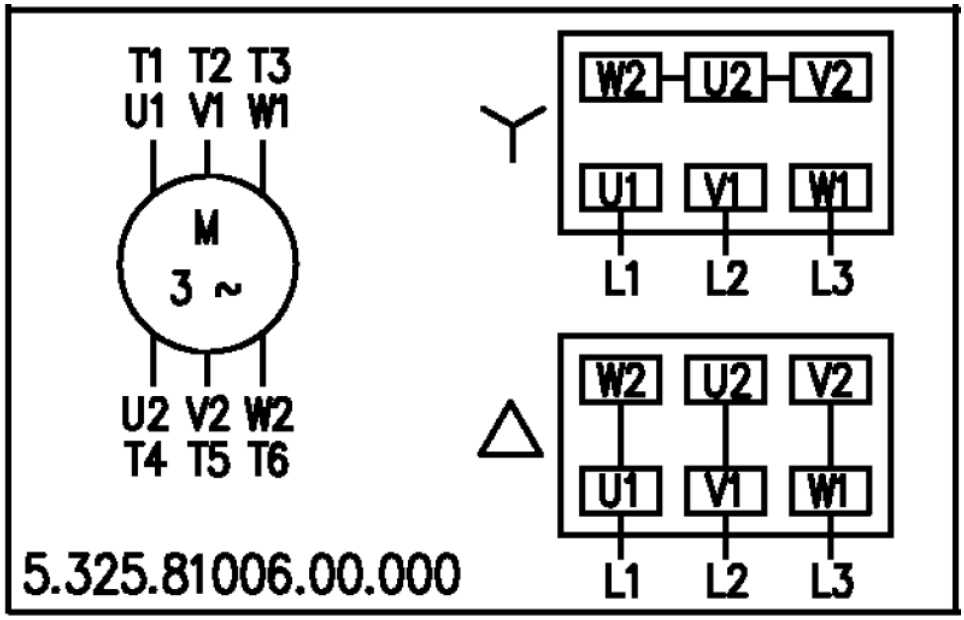




-Klemmen fuer Hilfseinrichtung
terminals for auxiliry equipment
falls notwendig
if necessary

10.2 MOTOR TERMINAL BOX DRAWING

	Angebot-Nr.: Offer No.:
PD LD	Anlage: Projekt:
Datum/Date: 03.2016	Terminal box TB1J01 standard
Einheit / unit: mm	
SIEMENS	Auschlusskasten TB1J01 standard



Tolerance	Surface	Material	Weight	Scale
	Author Z000ANCN	main terminal diagram Hauptklemmenplan		
	Creator DTC / DTK			
	Approval			
	Department PD LD P PPM DTM			
	Change Order 07.2016	MLFB		Doc Type /
SIEMENS	Doc State	Item No		Paper Size A4
	Revision Index RS	Doc No		1st Language en 2nd Language de
© Siemens AG	Project No	Ref No		Sheet 1 of 1

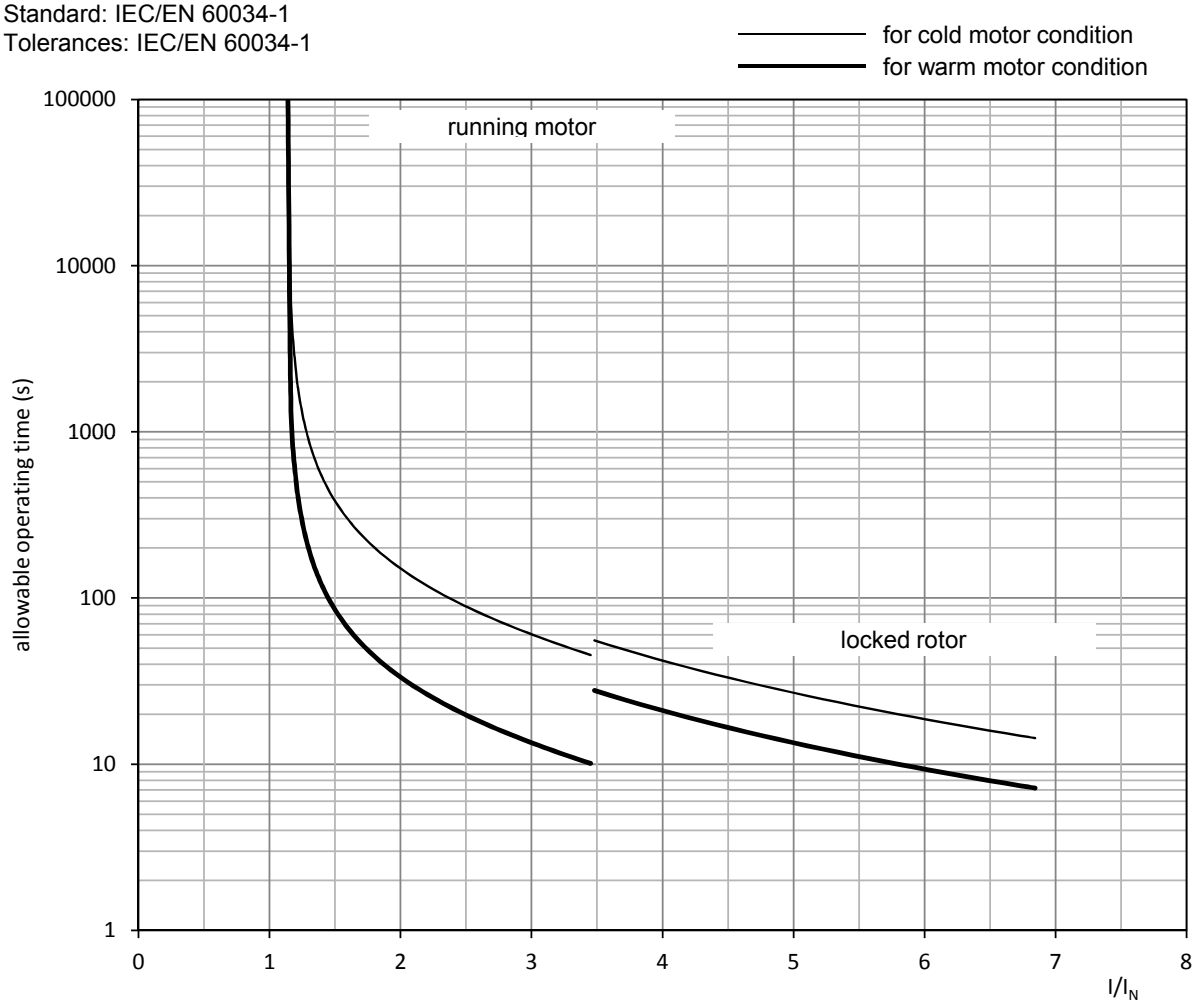
S	**Thermal Limit Curve** Three-Phase-Inductionmotor with Squirrel Cage Rotor

Operating and Installation Data:

10.5 MOTOR THERMAL CAPACITY CURVE

Rated-					
-power	P_N:	7,5 kW	Connection	:	D
-voltage	U_N:	380 V	Class of rating	:	S1
-frequency	f_N:	50 Hz	Absolute altitude	:	<1000 m ab.s.l.
-current	I_N:	14,2 A	Coolant temperature	:	40 °C
-speed	n_N:	2925 1/min	Therm. class (design/util.)	:	155 (F) / 130 (B)
-torque	M_N:	25 Nm			
Power factor	cosφ:	0,91			

Standard: IEC/EN 60034-1
Tolerances: IEC/EN 60034-1



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Author	Checked	TRA	Type
KRATOCHVÍLOVÁ,L	-	320226	1LE1501-1CA69-0GA4-Z
Department	Standard	Date	1904449/9
PD LD P R&D 2 MOH 4		21.02.2017	
	L23+M1Y+N30+R10+R50+S01+S05		

S

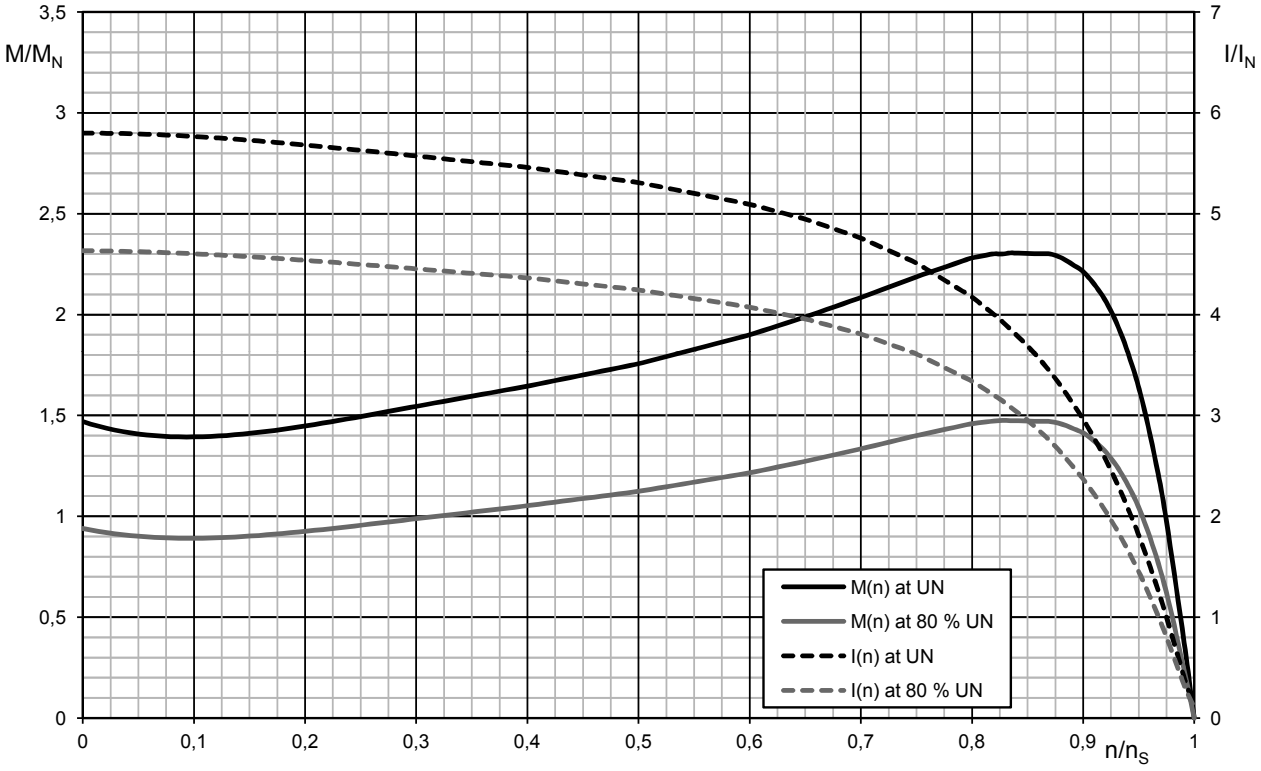
Starting Data M=f(n), I=f(n)

Three-Phase-Inductionmotor with Squirrel Cage Rotor

Operating and Installation Data:

Rated-						
-power	P_N:	7,5	kW	Connection	:	D
-voltage	U_N:	380	V	Class of rating	:	S1
-frequency	f_N:	50	Hz	Absolute altitude	:	<1000 m ab.s.l.
-current	I_N:	14,2	A	Coolant temperature	:	40 °C
-speed	n_N:	2925	1/min	Therm. class (design/util.)	:	155 (F) / 130 (B)
-torque	M_N:	25	Nm			
Power factor	$\cos\varphi$:	0,91				

Standard: IEC/EN 60034-1
Tolerances: IEC/EN 60034-1



Ia/In<6.0

Author KRATOCHVÍLOVÁ,L	Checked -	TRA 320226	Type 1LE1501-1CA69-0GA4-Z
Department PD LD P R&D 2 MOH 4	Standard	Date 21.02.2017	1904449/9
	L23+M1Y+N30+R10+R50+S01+S05		