

MEDIUM VOLTAGE SQUIRREL CAGE
INDUCTION MOTOR (DOL)

Datasheet No.
6907-117-XZ-DS-4360

Rev : 0

Page 1 of 1

P.4-1

PURCHASER'S DATA (Not to be part)

A. Site conditions					
1	Ambient temperature, minimum:	1	°C	3	Atmospheric condition: Humid & highly corrosive
	maximum:	39.8	°C	4	Altitude: < 1000 m
	design:	40	°C	5	Location:
2	Relative humidity:	93	%	6	
B. Technical particulars					
1	Motor tag no.:	117-PM-804			
2	Driven equipment name:	Mixer hydraulic oil pump motor			
3	Voltage:	415 V ±6%	16	Hazardous area classification:	
4	Phase:	Three	17	Gas group: IIC	
5	Frequency:	50 Hz ±3%	18	Type of explosion protection: EX-d, IIC, T4	
6	Fault level:	50 kA	19	Type of ingress protection: IP 55	
7	Method of starting:	DOL	20	Color shade: RAL-7031	
8	Winding connection:	Delta	21	Thermistors:	☐ Required ☒ Not required
9	No. of terminals:	6	22	RTD:	☐ Required ☒ Not required
10	Cable size:	3C x 16 mm ²	23	BTD:	☐ Required ☒ Not required
11	Cable type:	PVC Insulated Copper Armoured cable	24	RTD/BTD monitoring device:	☐ Required ☒ Not required
12	Temperature rise:	80 K		Make:	
13	Cooling:	fan		Applicable specification: EIL spec. 6-51-0032	
14	Insulation class:	155/130 F	25		
15	(with temp rise limited to B)		26		

DRIVEN EQUIPMENT MANUFACTURER'S DATA (Not to be part)

1	Suggested motor rating:	11 kW	9	Torque required, starting:	20.89 mkg
2	Manufacturer:	Sumitomo Precision Products Co.Ltd		maximum:	4.61 mkg
3	BkW at full load:	7.1 kW	10	GD ² of eqpt., including flywheel:	0.00035 kgm ²
4	kW at end of curve:	7.1 kW		excluding flywheel:	0.00013 kgm ²
5	Speed:	1500 RPM	11	Thrust, up:	NA kg
6	Rotation viewed from coupling end:	CW		down:	NA kg
7	Driven equipment:	Pump	12	Starting condition:	Not required
8	Coupling type:	Chain Coupling			

MOTOR MANUFACTURER'S DATA

1	Rating:	11 kW	16	Efficiency at, 75% voltage:	89.8 %
2	Manufacturer:	Loher GmbH		100% voltage:	89.8 %
3	No. of poles:	4	17	Power factor at, starting:	0.6
4	Frame designation:	160M		100% load:	0.82
5	Full load speed:	1460 RPM	18	Moment of inertia, Jmot:	0.068 kgm ²
6	Mounting:	IMB3	19	NDE bearing type & no.:	6310/C3
7	Full load torque (FLT):	71.9 Nm	20	DE bearing type & no.:	6310/C3
8	Starting torque:	285 % of FLT	21	Type of lubrication:	Regreasing
9	Break down or pull out torque:	222 %	22	Weight of motor:	150 kg
10	Full load current (FLC):	20.7 A	23	Thermistors, quantity:	N.A no.
11	Starting current at 100% voltage:	600 % of FLC		make: N.A- type:	N.A
12	Rotation viewed from coupling end:	CCW	24	RTD, quantity:	N.A no.
13	Starting time at, 75% voltage:	≤1.5 sec.		make: N.A type:	N.A
	100% voltage:	≤1 sec.	25	BTD, quantity:	N.A no.
14	Locked rotor withstand time (cold/hot) at,			make: N.A type:	N.A
	75% voltage:	44/22 sec.	26	Shaft voltage:	<0.25 V
	100% voltage:	28/14 sec.	27	Critical speed:	4500 RPM
15	Space heater - voltage & power:	N.A	28	Canopy for outdoor motors:	N.A
				☐ Required ☒ Not required	

1. Starting time calculations shall be based on operating conditions specified on Material Requisition eg. open valve condition/ closed valve condition, at no load/full load, as applicable.

KOBELCO

KOBE STEEL, LTD.
Machinery & Engineering
Company

Yaskawa Siemens
automation & drives

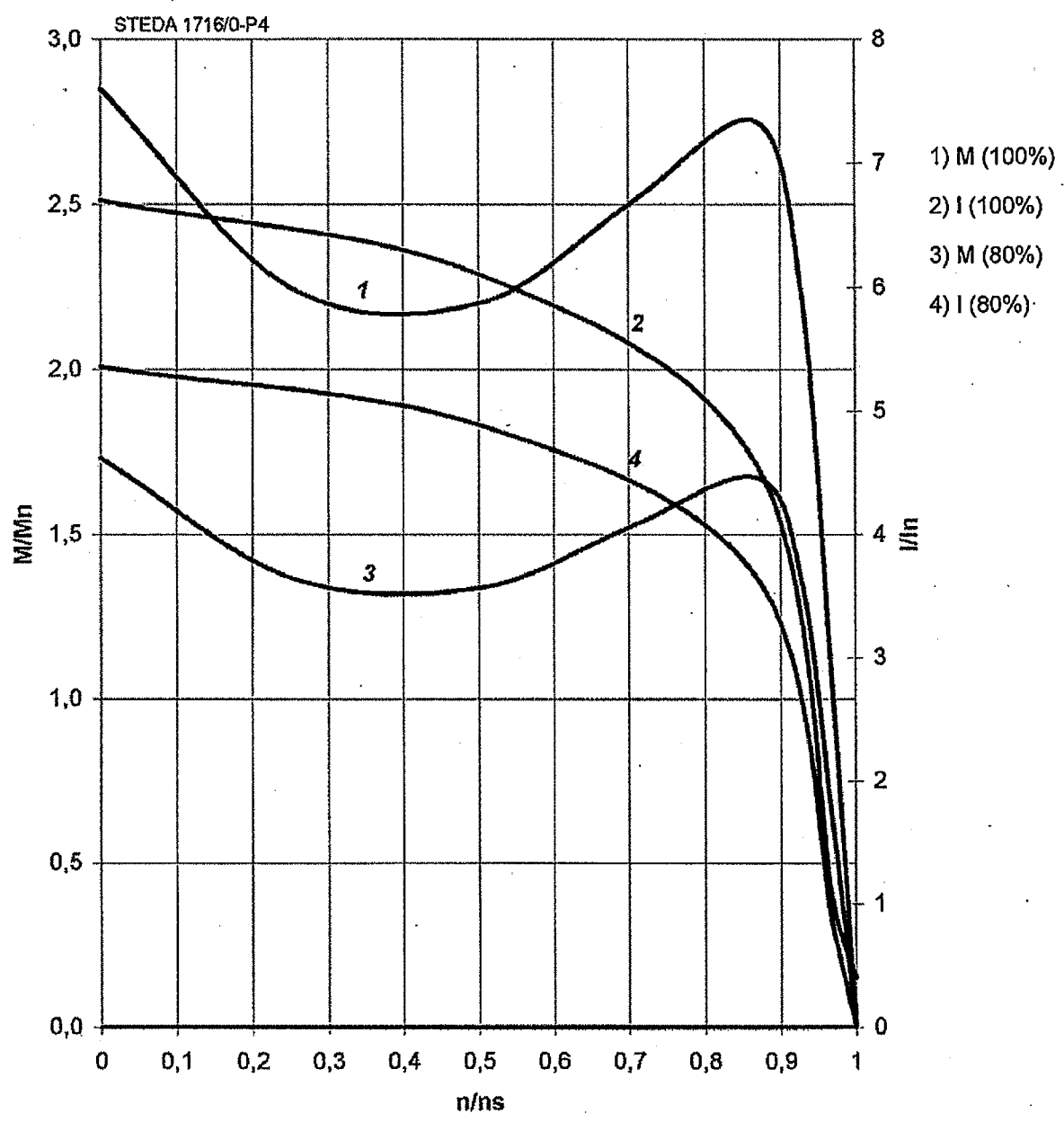
2. All unfilled data shall be filled by contractor/ vendor.

Rev.2 / PMOD52 / 21.12.2010 / Motor-no. 3400652 / 8874493 140

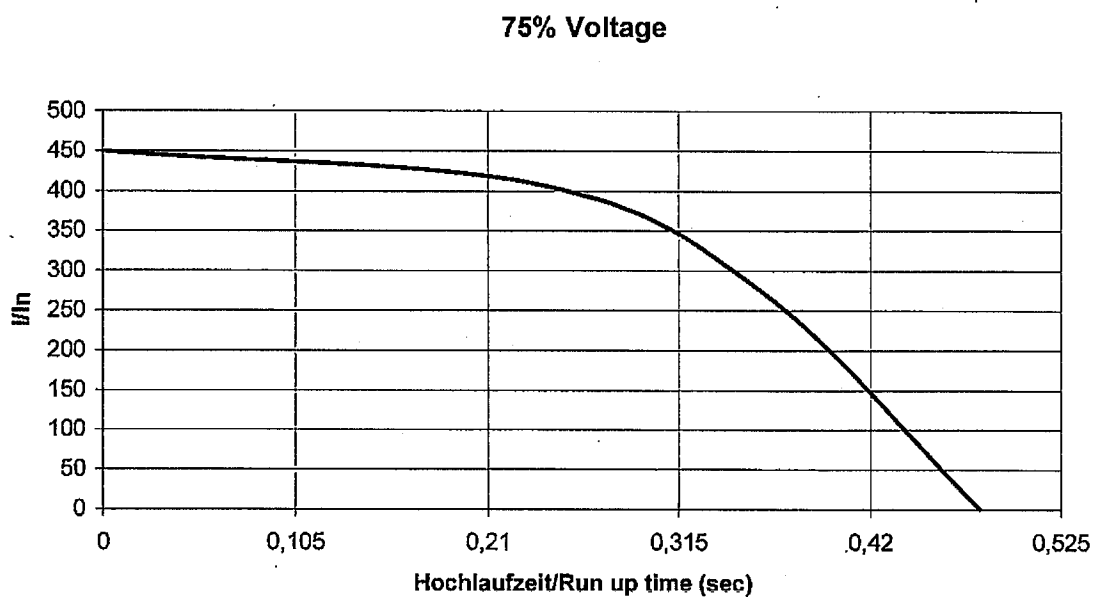
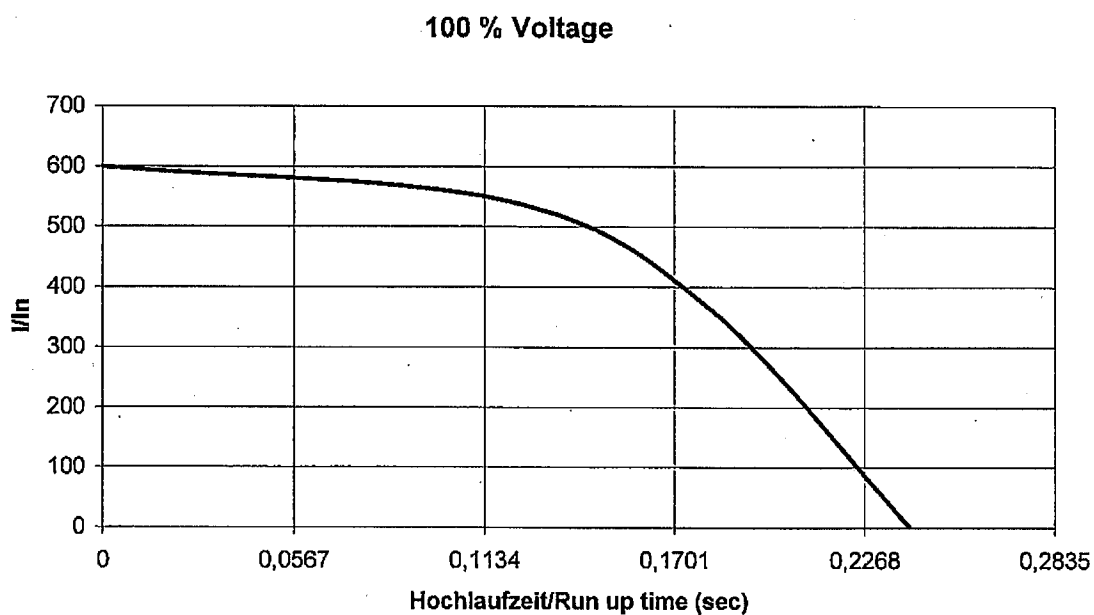
0	30.12.2009	ISSUED WITH PR(M/s KOBE STEEL)	JDM	VKJ	AKS
A	13.07.2009	ISSUED WITH MR	SMK	VKJ	AKS
Rev. No.	Date	Purpose	Prepared by	Checked by	Approved by

LOHER

Strom-Drehmoment-Kennlinie Current-Torque-Curve



Bemerkung Remark		ITEM-NO. 117-PM- 804				
Motor Typ Motor type		DNGW-160ML-04A		Bemessungsleistung Rated output	11 kW	EP-Nr. EP-No.
Bemessungsspannung Rated voltage		415 V		Bemessungsstrom Rated current (CR)	20,7 A	Motor-Nr. Motor-No.
Drehzahl Speed		1460 1/min rpm		Leistungsfaktor Power factor	0,82	3400652
Frequenz Frequency	50 Hz c/s	Polzahl Number of poles	4	Bemessungsmoment Rated torque	71,9 Nm	
	Tag; Date	Name; Name		Toleranzen nach/Tolerances acc. to DIN EN 60 034-1		Nr. No.
Bearb.; Designed	14.07.10	PM OD52				
Gepr.; Checked	14.07.10	PM OD50				
						SDK 16533



					0	0,105	0,21	0,315	0,42	0,525		
Hochlaufzeit/Run up time (sec)												
			Datum Date	Name Name								
	Änderung / Change	Bemerkung Remark	117-PM-804									
		Motor Typ Motor type			DNGW-160ML-04A			Bemessungsleistung rated output		11	kW	EP-Nr. EP-No.
		Bemessungsspannung rated voltage			415 V			Bemessungsstrom Rated current (CR)		20,5	A	
		Drehzahl Speed			1460 1/min rpm			Leistungsfaktor power factor		0,82		
		Frequenz Frequency		50	Hz	Poizahl Number of poles	4	Bemessungsmoment Rated torque (TR)		71,9	Nm	
				Tag; Date		Name; Name		Toleranzen nach/ Tolerances acc. to DIN IEC 38 - DIN EN 60 034-1			Nr. No.	SAK 8874493_140
		Bearb.; Designed		18.01.2011		MOOM153						
		Gepr.; checked		18.01.2011		MOOM150						

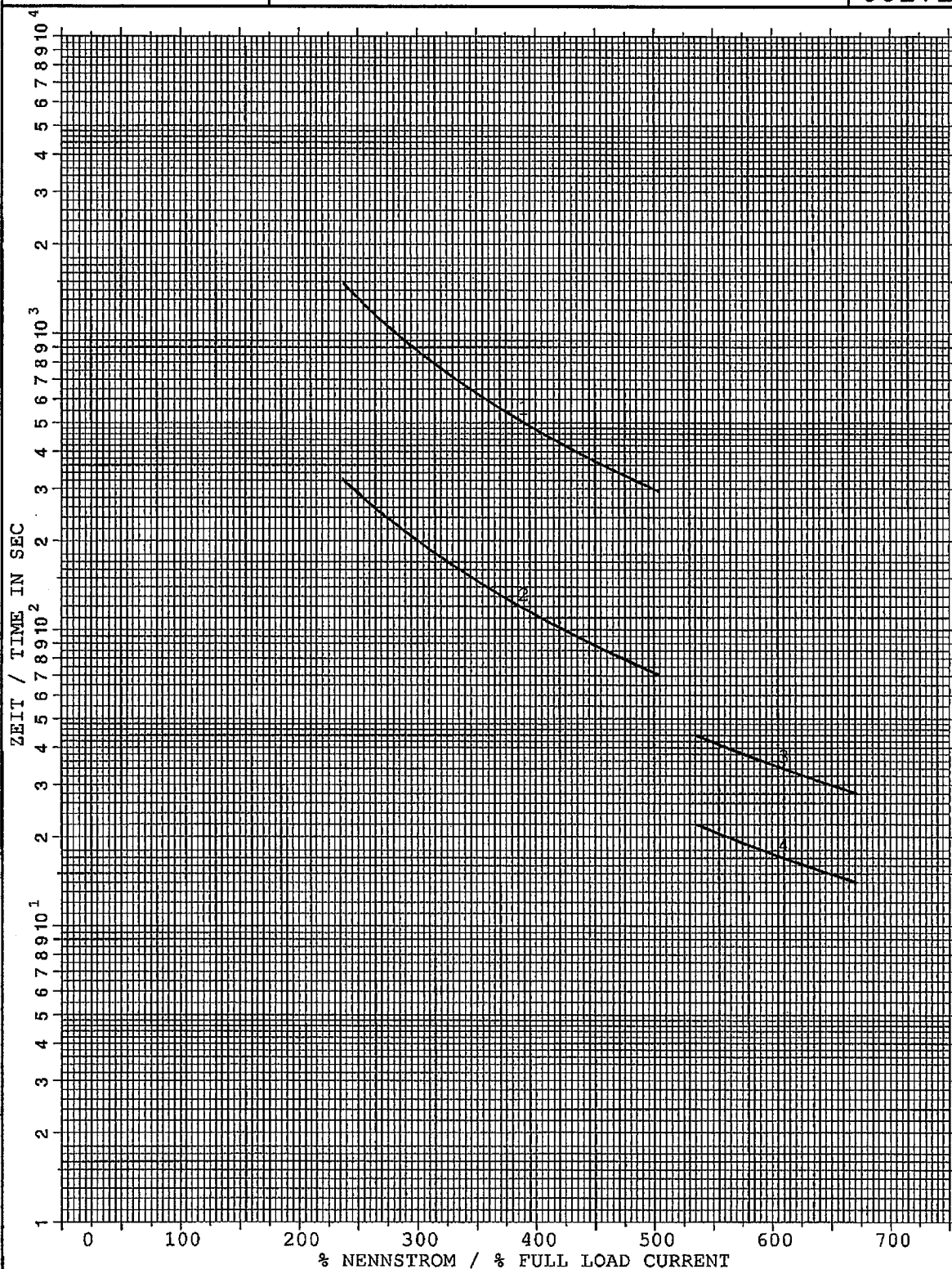
Thermische Grenzkennlinie
Thermal limit curve
IEEE Std. 620

Nr.

88496

Wickelangabe

001716



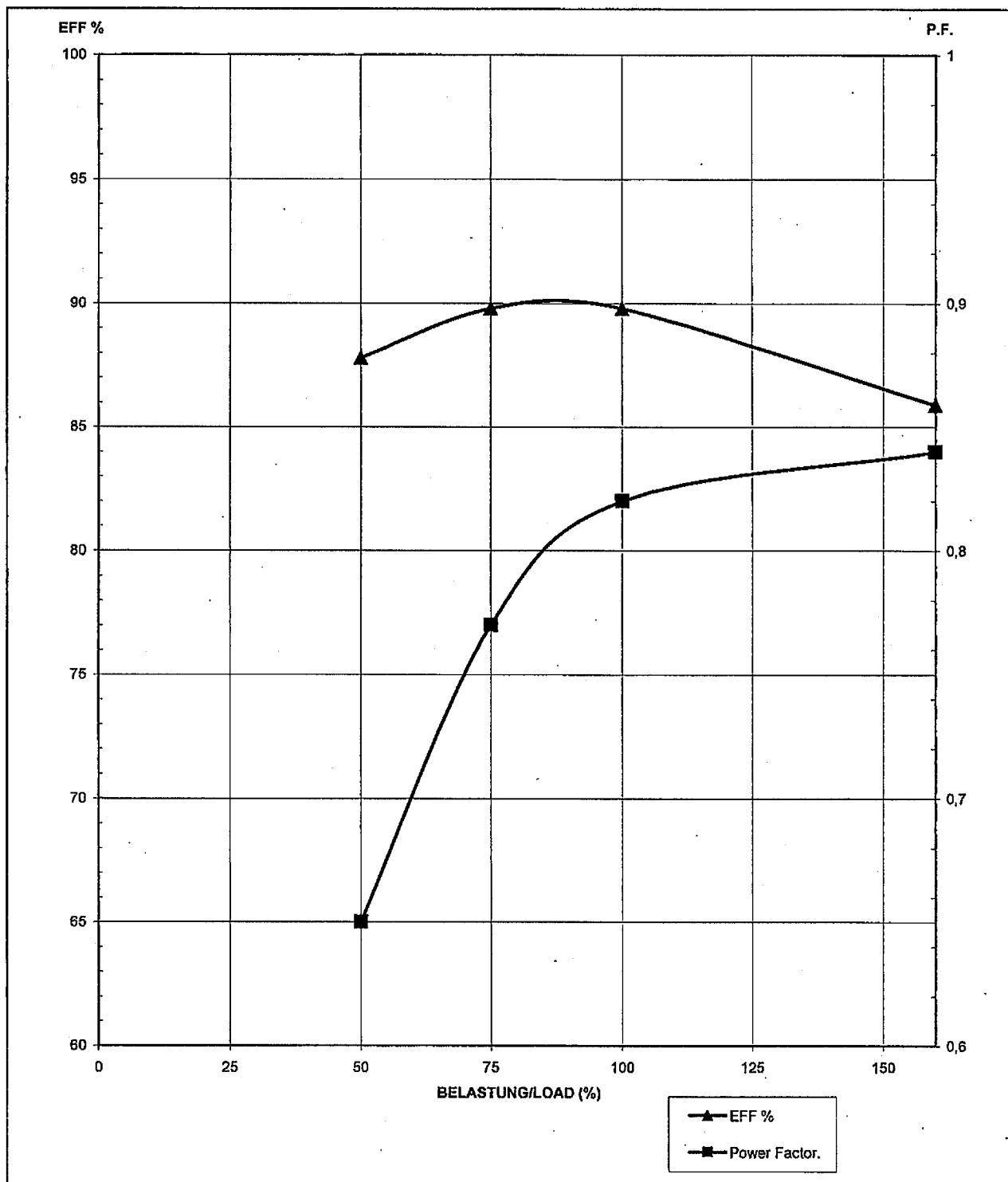
1 = Overload stator, cold
2 = Overload stator, hot
3 = Locked rotor, cold
4 = Locked rotor, hot

Ersteller	Name	
	Datum	Name
	29. 7. 2010	
Bearb.		
Gepr.		
Kunde Customer		Auftrag/Anfrage Enquiry/Order
Motor-Typ Motor-type		Nennleistung Rated output
DNGW-0160ML-04		11 kW
Nennspannung Rated voltage		Frequenz Frequency
415. V		50. Hz
Nennstrom (I_N) Rated current (I_N)		Leistungsfaktor ($\cos\phi$) Power factor ($\cos\phi$)
20.7 A		0.82
Drehzahl Speed		Nennmoment (M_N) Rated torque (M_N)
1460 1/min rpm		71.9 Nm
Polzahl Pol number		4.
		calculated values

LOHER

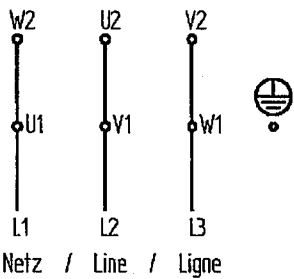
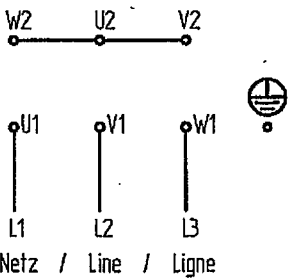
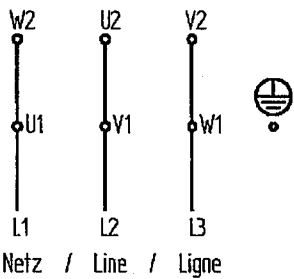
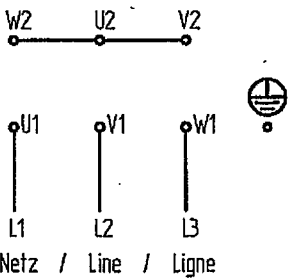
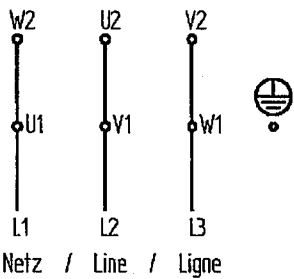
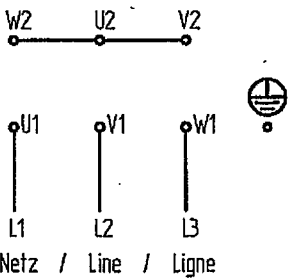
Leistungsfaktor-Wirkungsgrad-Leistung

Power factor-Efficiency-Load

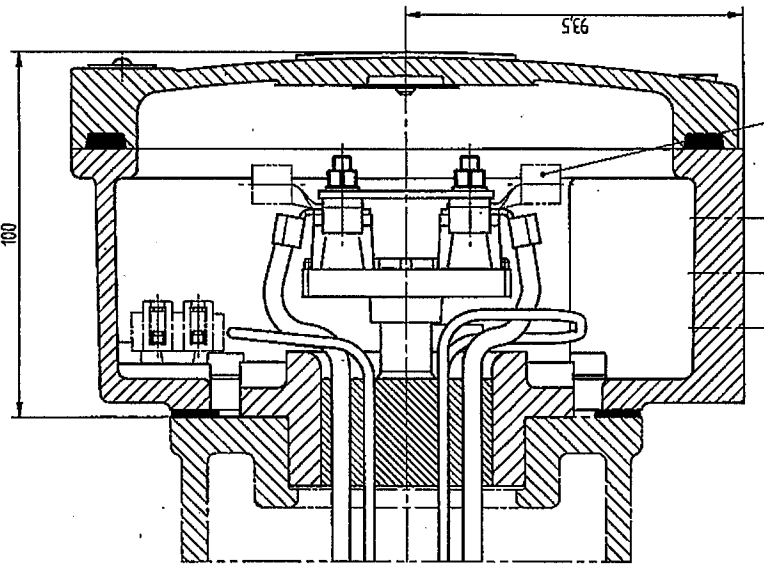


Die Datenbasis ist eine Typenprüfung eines elektrisch identischen Motors
 The basis of the given values is a performance test of a electrical identical motor

		Name Name
		Datum Date
Änderung / Change	Bemerkung Remark	117-PM-804
	Motor Typ Motor type	DNGW-160ML-04A
	Bemessungsspannung rated voltage	415 V
	Drehzahl Speed	1460 1/min rpm
	Frequenz Frequency	50 HZ
Buchstabe Letter	Polzahl Number of poles	4
	Bemessungsleistung rated output	11,00 kW
	Bemessungsstrom Rated current (CR)	20,50 A
Tag; Date	Leistungsfaktor power factor	0,82
	Bemessungsmoment Rated torque (TR)	71,9 Nm
	Toleranzen nach/ Tolerances acc. to DIN IEC 38 - DIN EN 60 034-1	
Gepr.; checked	Nr. No.	8874493_140

Wicklung Winding Bobinage		 = an Klemme geführt connected with terminal raccordé à la borne	 = am Wickelkopf verbunden connected on the winding head raccordé à la tête du bobinage	 = Stempunktverbindung lose im Anschlußkasten Star-point is connected within the terminal box Branchement étoile à branché dans la boîtes à bornes													
Die räumliche Anordnung der Klemmen braucht nicht mit dieser Darstellung übereinstimmen. The spacial arrangement of the terminals does not have to correspond with this drawing. Il n'est pas nécessaire que la disposition des bornes dans la boîte corresponde à ce schéma. <table border="1"> <tr> <td> Δ / Delta / Triangle  </td> <td> Y / Star / Étoile  </td> </tr> <tr> <td colspan="5"> Schaltung und Spannung siehe Leistungsschild Connection and voltage as given on the rating-plate Connexion et tension sont indiquées sur la plaque indicatrice X1001 </td> </tr> </table>					Δ / Delta / Triangle 	Y / Star / Étoile 	Schaltung und Spannung siehe Leistungsschild Connection and voltage as given on the rating-plate Connexion et tension sont indiquées sur la plaque indicatrice X1001										
Δ / Delta / Triangle 	Y / Star / Étoile 																
Schaltung und Spannung siehe Leistungsschild Connection and voltage as given on the rating-plate Connexion et tension sont indiquées sur la plaque indicatrice X1001																	
<table border="1"> <tr> <td>Ersteller</td> <td>Datum</td> <td>Name</td> </tr> <tr> <td>Bearb.</td> <td>08.10.2004</td> <td>harvath</td> </tr> <tr> <td>Gepr.</td> <td>03.12.2004</td> <td>TMT58</td> </tr> </table>		Ersteller	Datum	Name	Bearb.	08.10.2004	harvath	Gepr.	03.12.2004	TMT58	<table border="1"> <tr> <td>letzte Änderung:</td> <td>Name</td> </tr> <tr> <td>Datum</td> <td></td> </tr> </table>			letzte Änderung:	Name	Datum	
Ersteller	Datum	Name															
Bearb.	08.10.2004	harvath															
Gepr.	03.12.2004	TMT58															
letzte Änderung:	Name																
Datum																	
CAU-SE		Teilklasse 20503															
Änderungs-Bemerkung																	

optional
wallwise



Max. Anschlußquerschnitt 10 mm².
Max. cross section 10 mm².
Wahlweise mit Kabelschuh max. 25 mm².
Optionally with cable lug max. 25 mm².

[illegible]

Number of terminals acc. to wiring diagram.

Beim Anschließen des Motors sind die Bezeichnungen der Klemmen gemäß Schaltbild zu beachten!
For connection of the motor observe the terminal markings according to the wiring diagram!

LOHER

Lager- und Schmierdatenblatt

Data sheet for bearing and lubrication

Lagerung / Bearings

Lager AS Bearing DE	6310 / C3	DIN 625
Lager BS Bearing NDE	6310 / C3	DIN 625

Schmierung / Lubrication

Schmierart Type of lubrication	Nachschmierung Regreasing		
Schmiermittel Lubrication	Shell Alvania RL3 Shell Alvania RL3		
Fetterstfüllmenge First filling quantity of grease	AS: DE:	120 g	BS: NDE: 120 g
Fettnachschmiermenge Regreasing quantity	AS: DE:	15 g	BS: NDE: 15 g
Nachschmierfrist bei Nachschmiereinrichtung Relubrication interval with regreasing device	11000 h	bei Umgebungstemperatur at ambient temperature -20/+40 °C	
Fettstandzeit bei Dauerschmierung Grease life with permanent lubrication	—		
Lagerlebensdauer Bearing life time	50000 h		
max. Lagertemperatur max. bearing temperature	120 °C		

Sonstige Daten und Bemerkungen:

Additional data and remarks:

*Zusätzlich zu diesem Lager- und Schmierdatenblatt ist die Betriebsanleitung zu beachten!**In addition to this data sheet for bearing and lubrication the operating instruction should be observed!*

Bemerkung Remark	ITEM-NO. 117-PM- 804		
Motor Typ Motor type	DNGW-160ML-04A	Bemessungsleistung Rated output	11 kW
Bemessungsspannung Rated voltage	415 V	Bemessungsstrom Rated current	20,7 A
Drehzahl Speed	1460 1/min rpm	Leistungsfaktor Power factor	0,82
Frequenz Frequency	50 Hz c/s	Polzahl Number of poles	4
		Bemessungsmoment Rated torque	71,9 Nm
	Tag; Date	Name; Name	Toleranzen nach/Tolerances acc. to DIN EN 60 034-1
Bearb.; Designed	14.07.10	PM OD52	
Gepr.; Checked	14.07.10	PM OD50	
		Nr. No.	LSD 04625