








OWNER:  شرکت سست و سوسا آبرسان (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	COMPRESSOR MOTOR CURVE FOR NITROGEN GAS BOOSTER						 Netherlands		
MC :  شرکت سست و سوسا آبرسان (سهامی خاص)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No: 52-98/445	
Owner Document Number: 17811-54A	BU	20	VD	303	EL		0052	Rev.:	Page
								00	1 of 5

COMPRESSOR MOTOR CURVE FOR NITROGEN GAS BOOSTER

 شرکت سست و سوسا آبرسان (سهامی خاص)	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
Document Review		
Issue Purpose:	FA	
Result Code: AP,AN,CM,RE,NC	CM	
Next Status : IFC,IFA,IFI,AFC,AB	IFA	
Responsible Department	MECHANICAL	
Commented Date	JAN/1/2021	
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.		

00	10/12/2021	For approval	KP	LdM	JR	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P

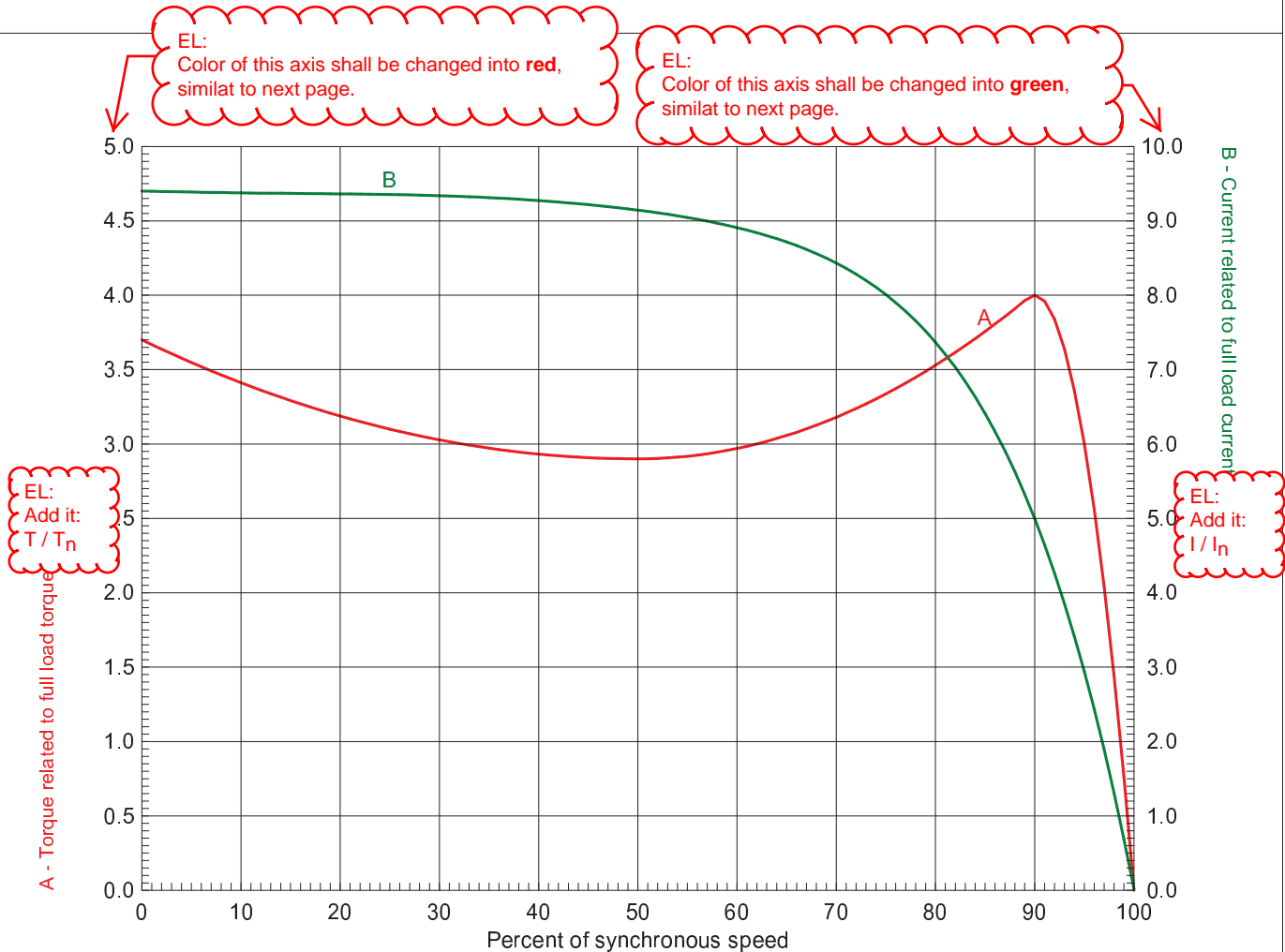
TORQUE AND CURRENT X SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : AIRPACK B.V.

Product line :



Performance : 45 kW (60 HP) 400/690 V 50 Hz 4P 225S/M

Rated current	: 85.1/49.3 A	Moment of inertia (J)	: 0.7347 kgm ²
LRC (p.u.)	: 9.4	Duty cycle	: S1
Rated torque	: 290 Nm	Insulation class	: F
Locked rotor torque	: 370 %	Service factor	: 1.00
Breakdown torque	: 400 %	Temperature rise	: 65 K
Rated speed	: 1484 rpm	Design	: N

Locked rotor time 100% : 19 s (hot) 35 s (cold)
 Load inertia (J=GD²/4) : 0.7347 kgm²

Rev.	Summary of changes	Performed	Checked	Date
Performed by	jessicasc	324260/2021-A1		
Checked by	josianeh	Page	Revision	
Date	22/11/2021	3/7	0	

LOAD PERFORMANCE CURVE

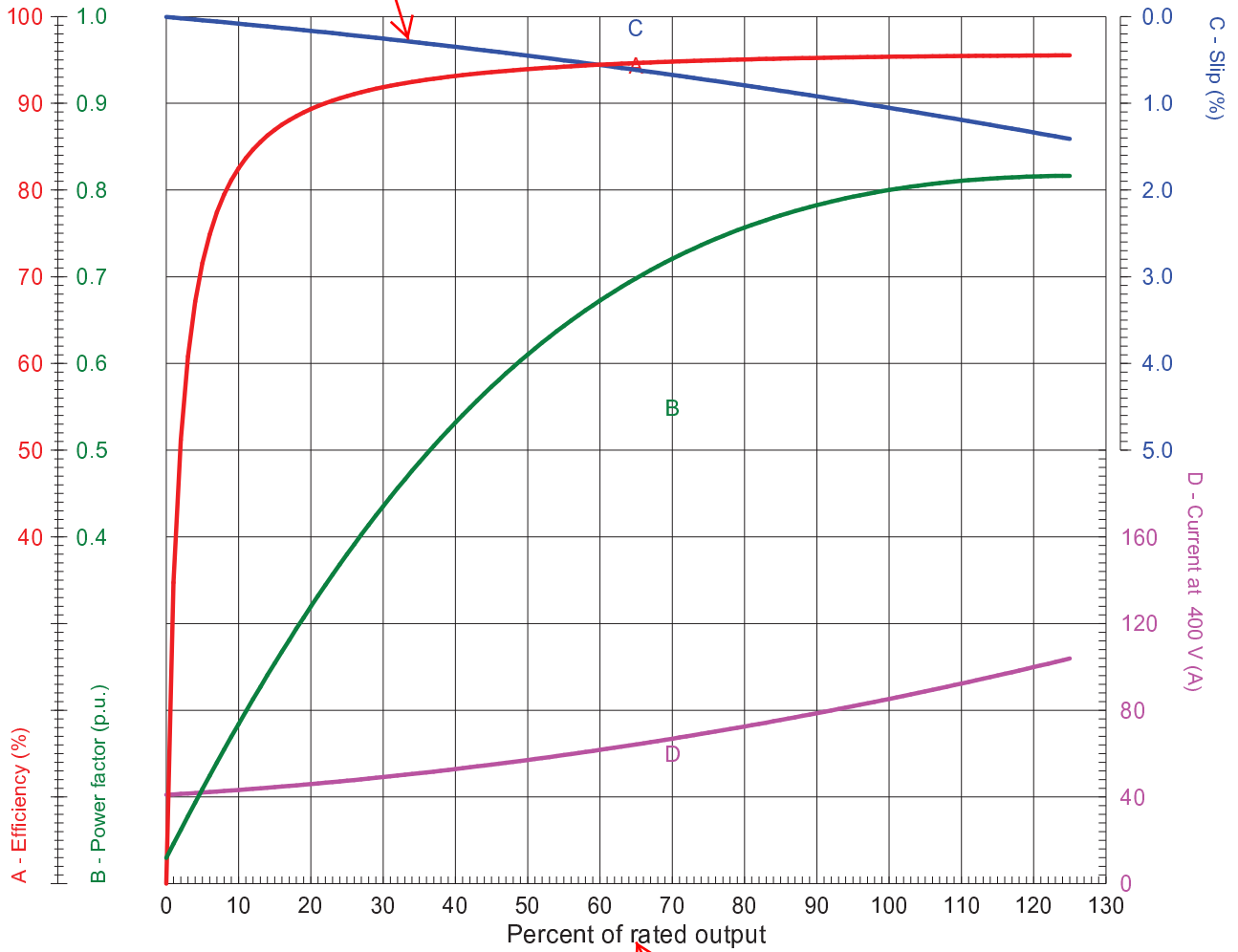


Three Phase Induction Motor - Squirrel Cage

Customer : AIRPACK B.V.

Product line :

EL:
 $S = (W_s - W_r) / W_s$
 Slip can change from 1 (at start) to 0 (at full load).
 It seems that this curve is not true.
 Please clarify it.



EL:
 Please clarify this axis.

Performance : 45 kW (60 HP) 400/690 V 50 Hz 4P 225S/M

Rated current : 85.1/49.3 A
 LRC (p.u.) : 9.4
 Rated torque : 290 Nm
 Locked rotor torque : 370 %
 Breakdown torque : 400 %
 Rated speed : 1484 rpm

Moment of inertia (J) : 0.7347 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 65 K
 Design : N

EL:
 Refer to comments on previous pages.

Rev.	Summary of changes		Performed	Checked	Date
Performed by	jessicasc			324260/2021-A1	
Checked by	josianeh			Page	Revision
Date	22/11/2021			4/7	0

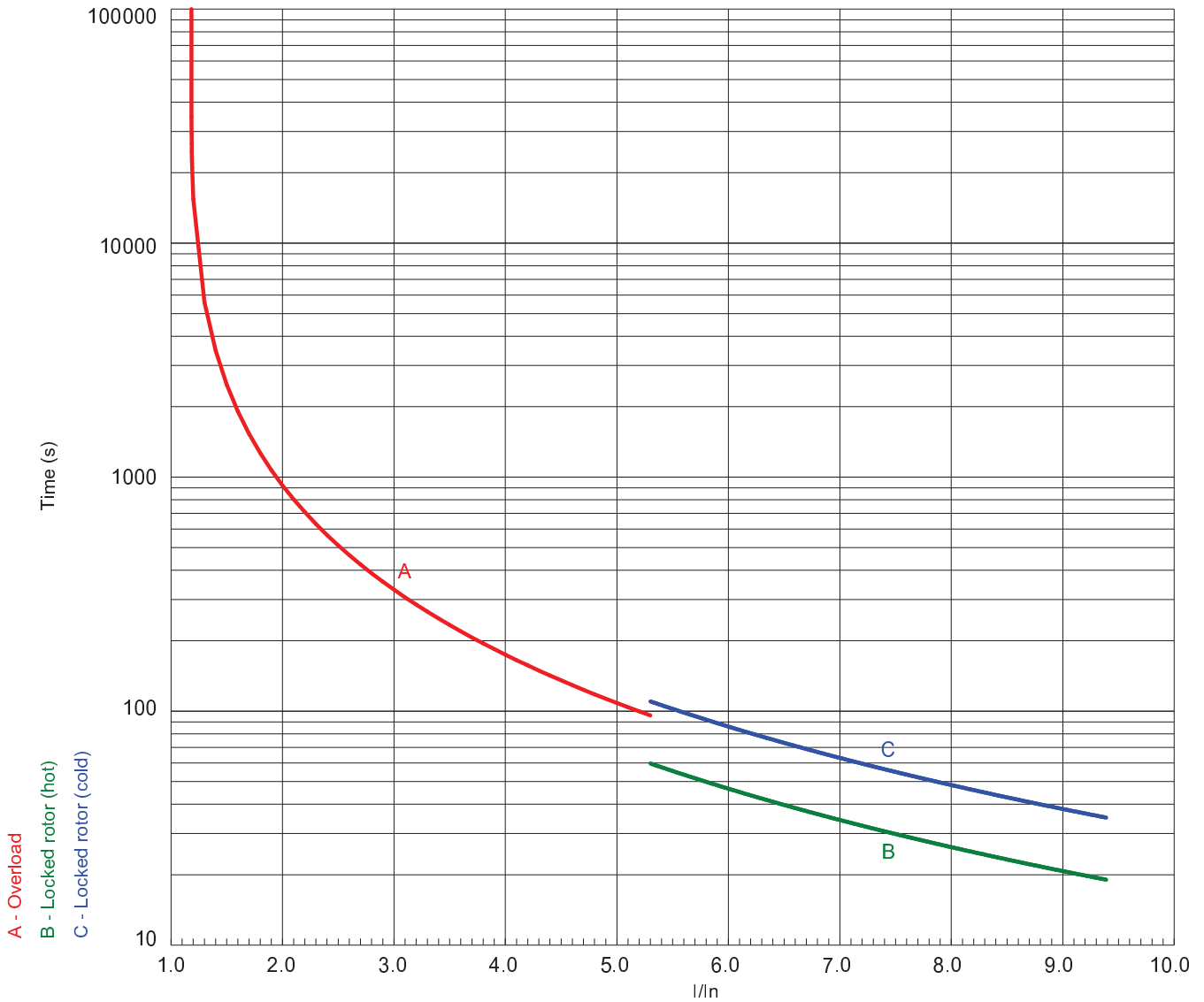
THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : AIRPACK B.V.

Product line :



Performance : 45 kW (60 HP) 400/690 V 50 Hz 4P 225S/M

Rated current	: 85.1/49.3 A	Moment of inertia (J)	: 0.7347 kgm ²
LRC (p.u.)	: 9.4	Duty cycle	: S1
Rated torque	: 290 Nm	Insulation class	: F
Locked rotor torque	: 370 %	Service factor	: 1.00
Breakdown torque	: 400 %	Temperature rise	: 65 K
Rated speed	: 1484 rpm	Design	: N

Heating constant : 35.8 min
Cooling constant : 107.4 min

EL:
Refer to comments on previous pages.

Rev.	Performed	Checked	Date
Performed by	jessicasc	324260/2021-A1	
Checked by	josianeh	Page	Revision
Date	22/11/2021	5/7	0