







OWNER:  شرکت سست و سویی گیس ایران (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT							EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	
	MC :  شرکت سست و سویی گیس ایران (سهامی خاص)	COMPRESSOR MOTOR CURVE FOR NITROGEN GAS BOOSTER							
Owner Document Number: 17811-54A		Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No: 52-98/445
	BU	20	VD	303	EL	DIG	0052	Rev.:	Page
								01	1 of 5

COMPRESSOR MOTOR CURVE FOR NITROGEN GAS BOOSTER

 شرکت سست و سویی گیس ایران (سهامی خاص)	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
Document Review		
Issue Purpose:	IFA	
Result Code: AP,AN,CM,RE,NC	AP	
Next Status : IFC,IFA,IFI,AFC,AB	AFC	
Responsible Department	MECHANICAL	
Commented Date	Jan /20/2022	
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.		

01	06/01/2022	For approval	KP	LdM	JR	
00	10/12/2021	For approval	KP	LdM	JR	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P

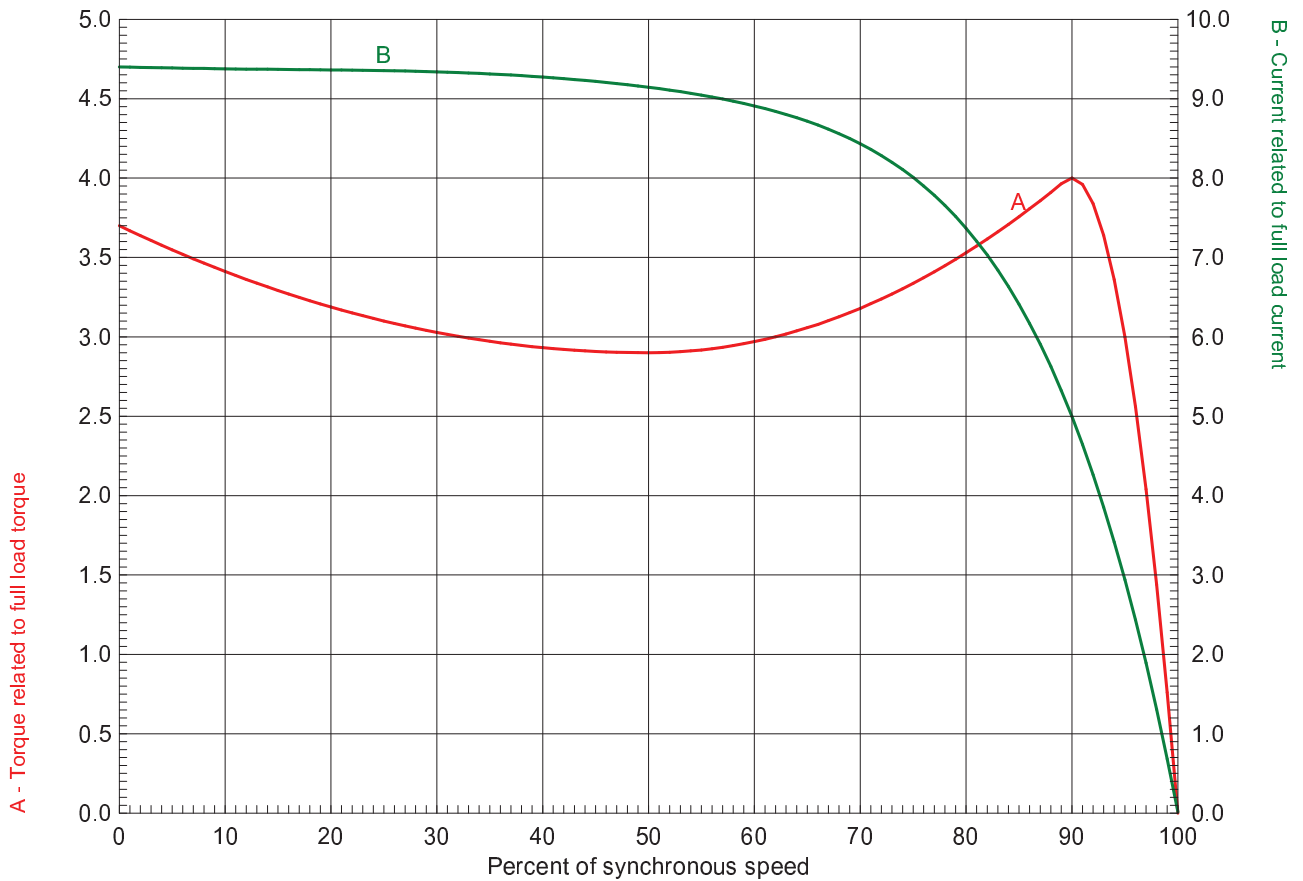
TORQUE AND CURRENT X SPEED CURVE



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	

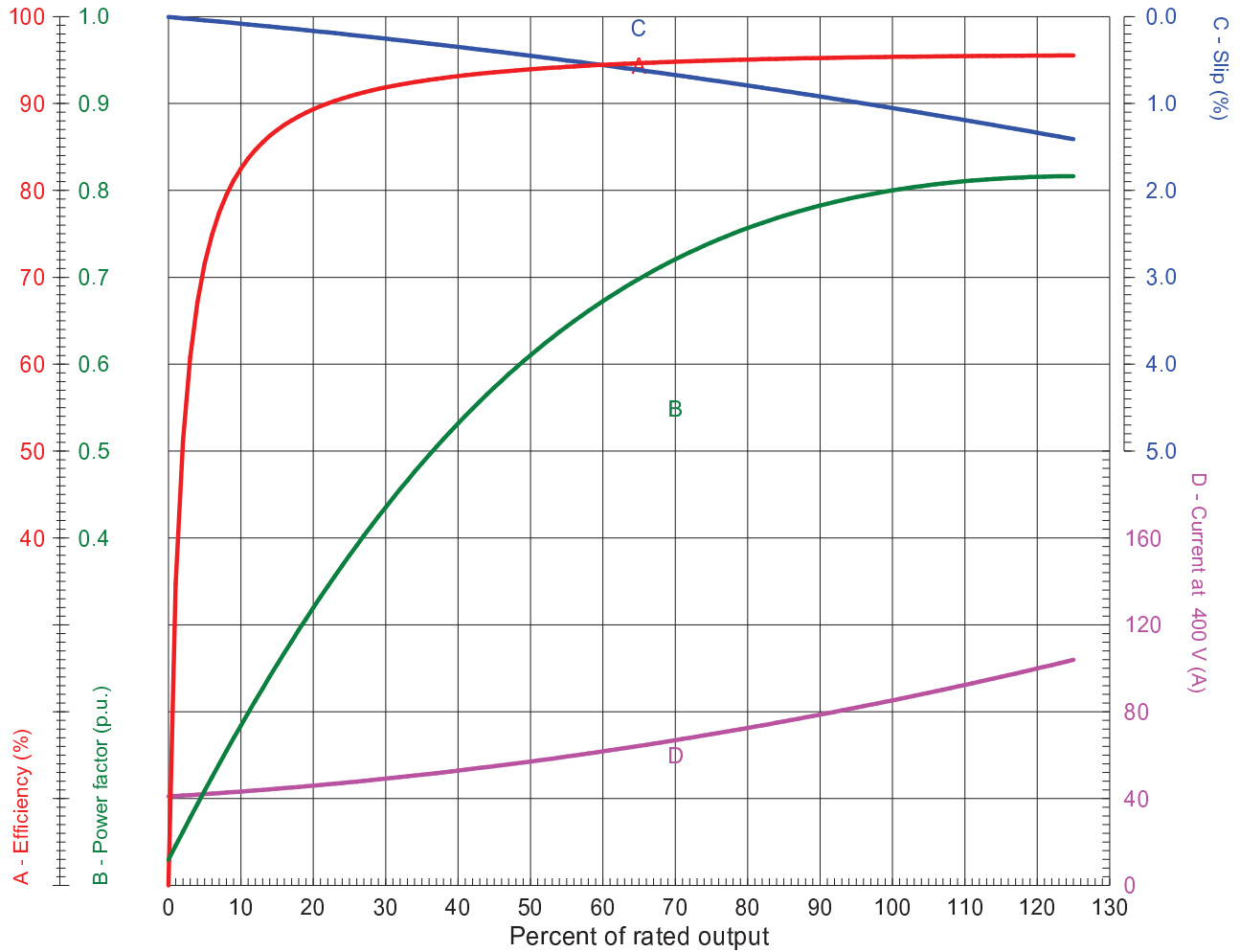
LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : AIRPACK B.V.

Product line :



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

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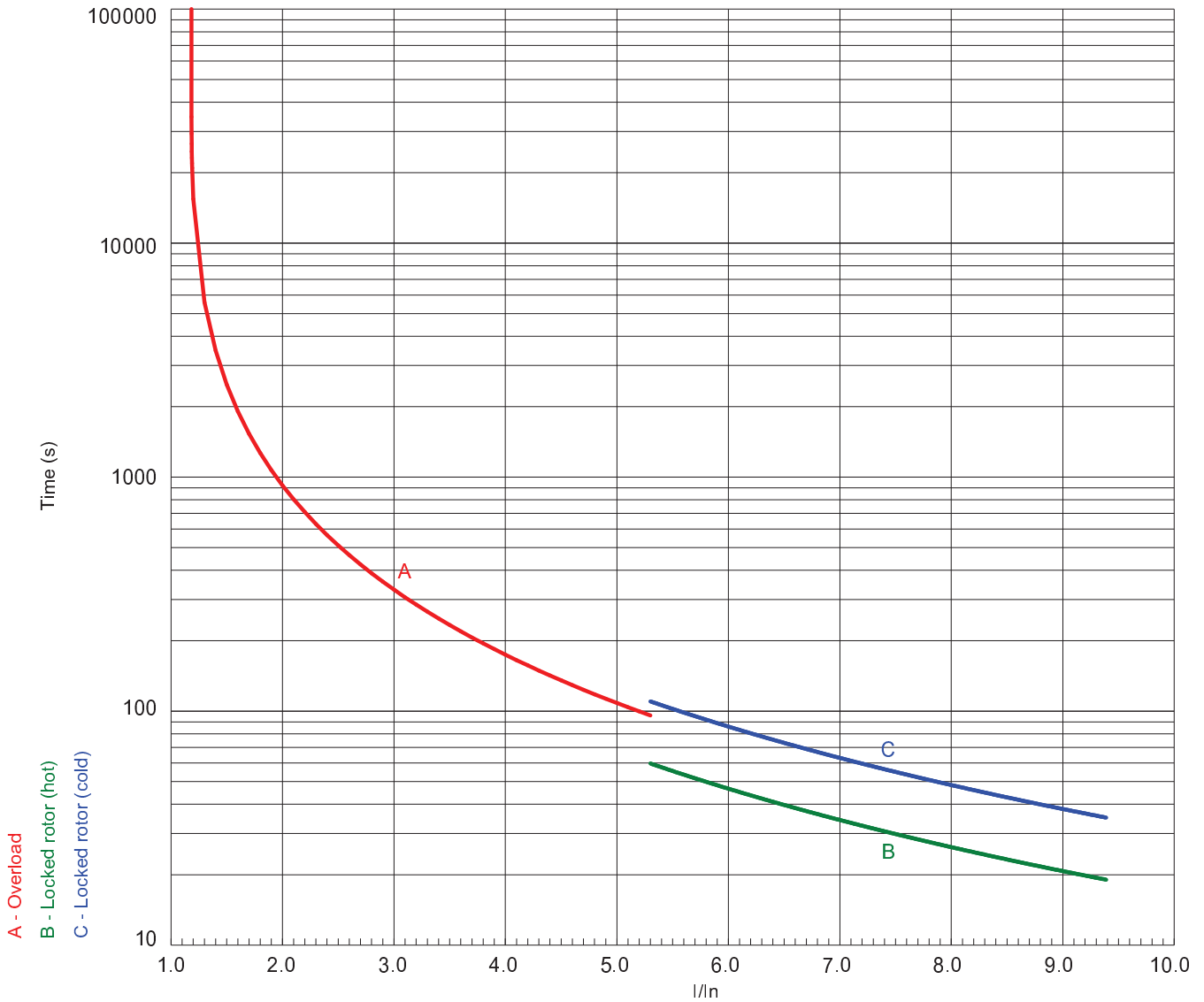
THERMAL LIMIT CURVE



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

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