





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

# COMPRESSOR MOTOR CURVE FOR NITROGEN GAS BOOSTER

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



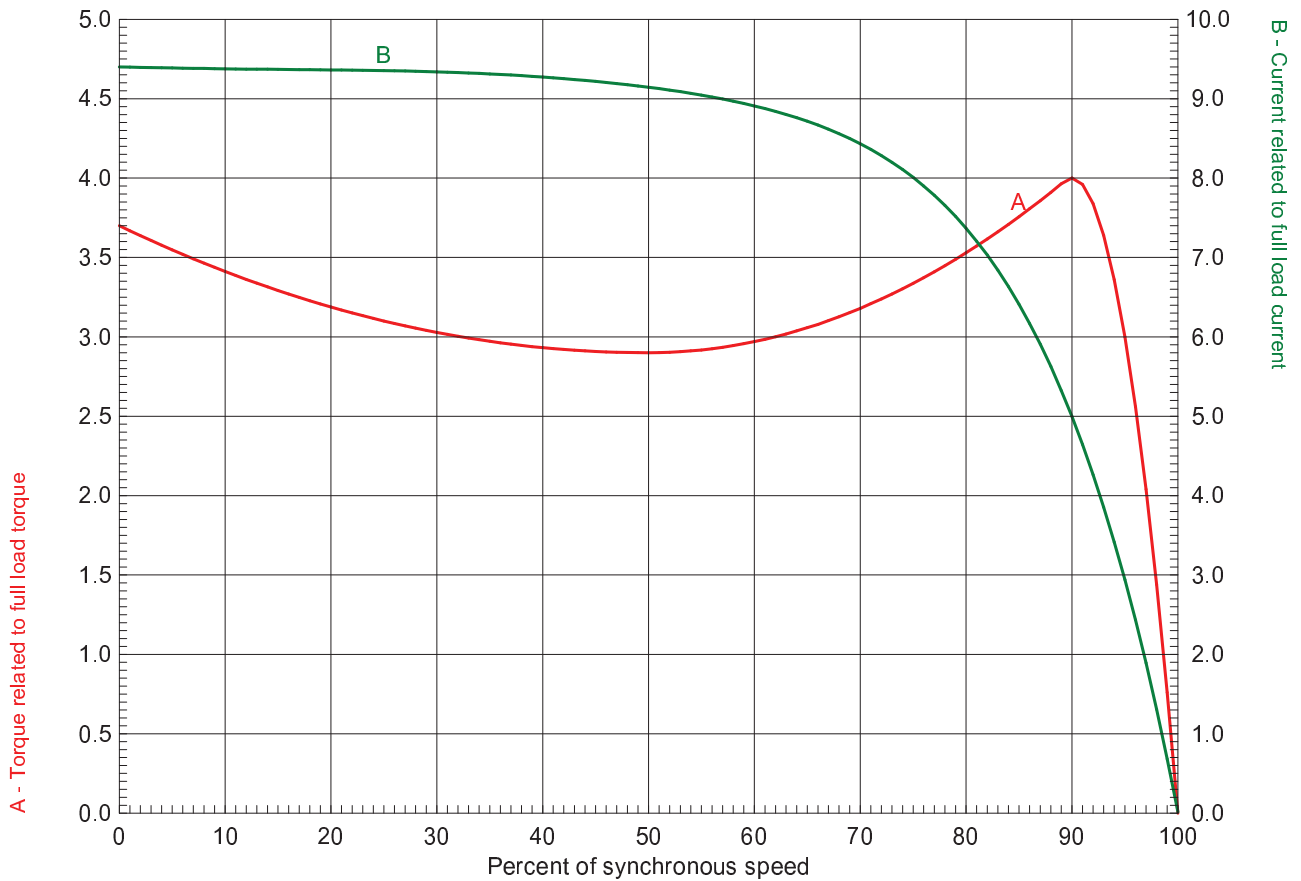
# TORQUE AND CURRENT X SPEED CURVE



## 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 <sup>2</sup>
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=GD<sup>2</sup>/4) : 0.7347 kgm<sup>2</sup>

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

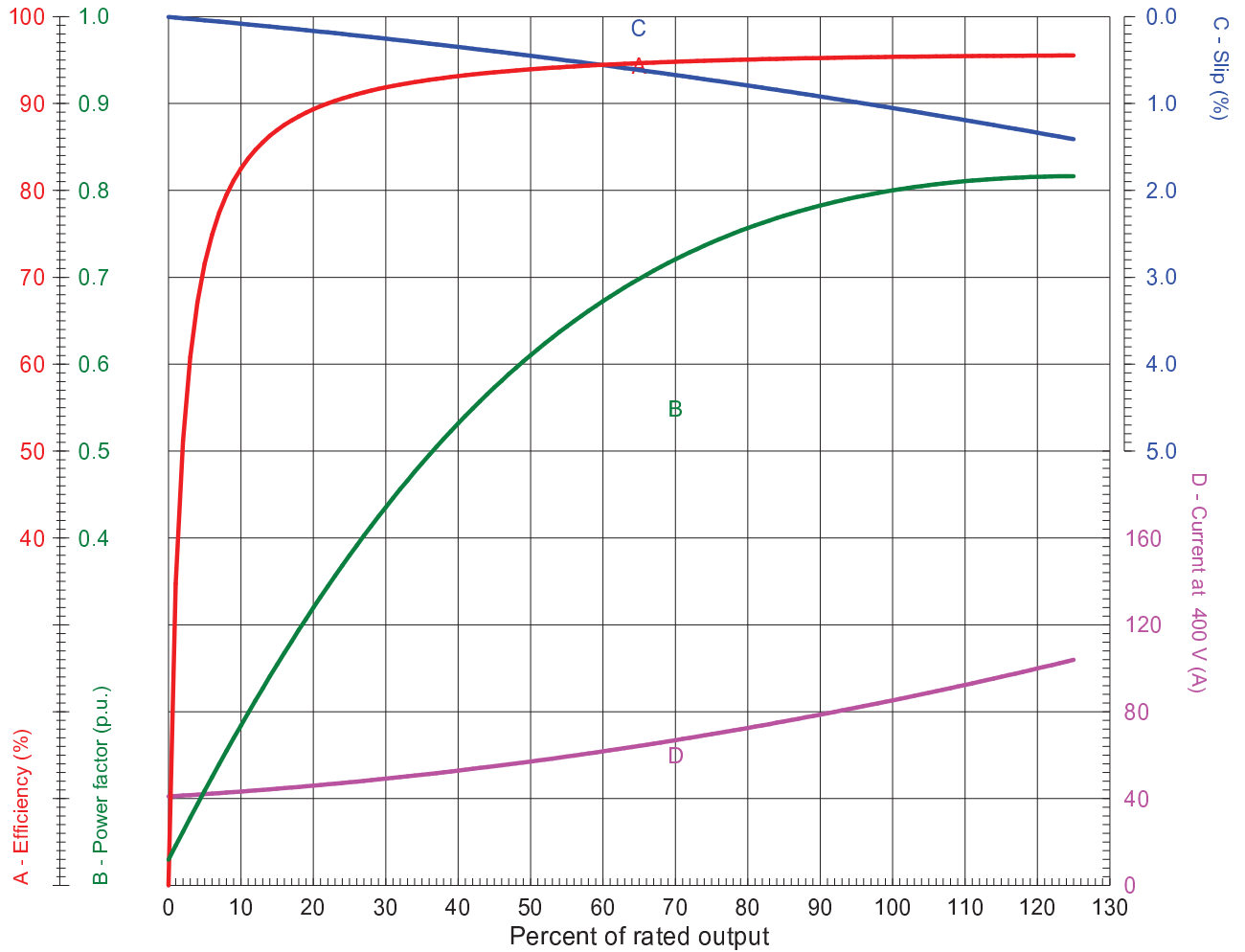
# LOAD PERFORMANCE CURVE



## 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 <sup>2</sup>
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

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	

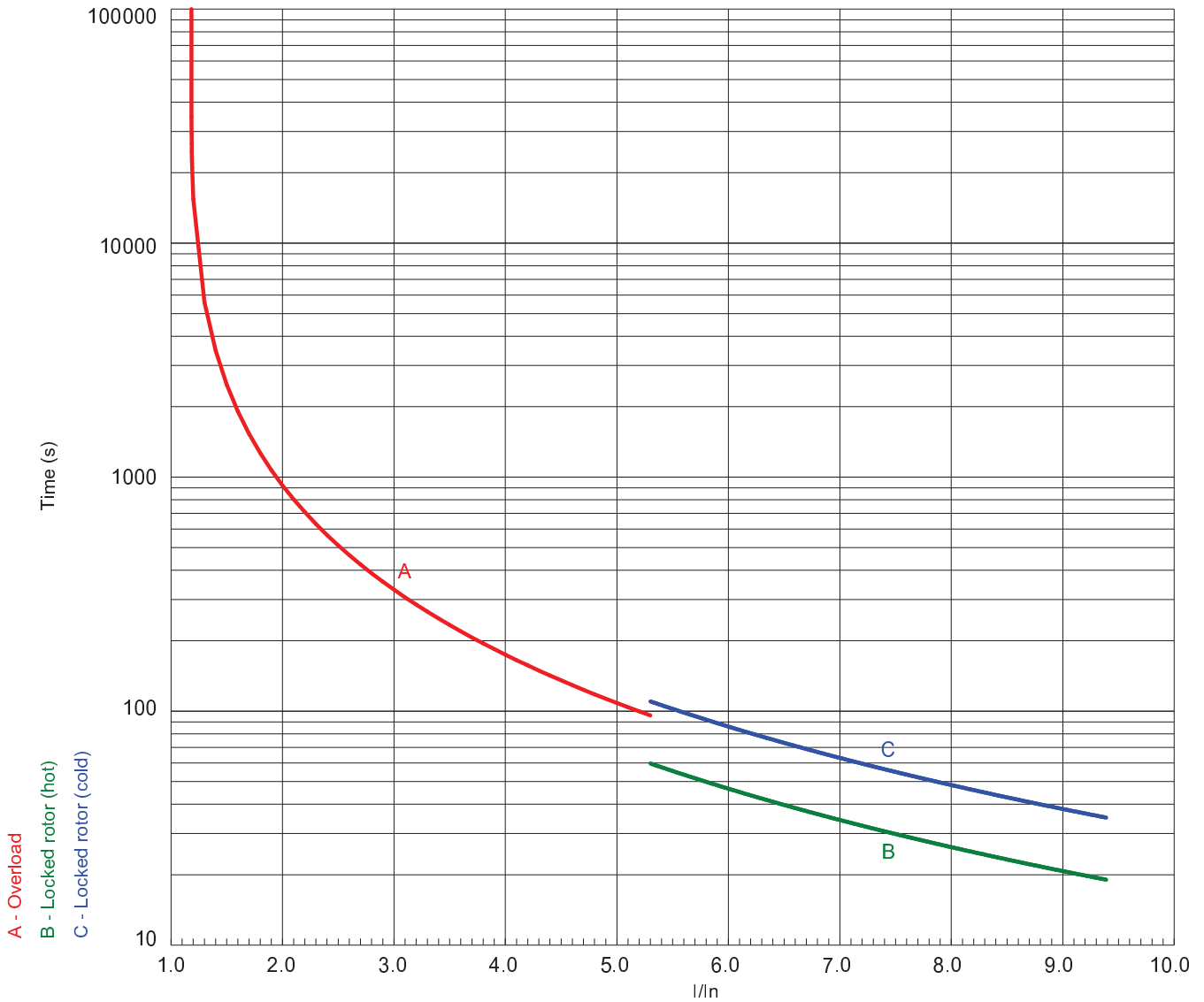
# THERMAL LIMIT CURVE



## 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 <sup>2</sup>
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