







OWNER:  شرکت سست و سویی گیسو ایران (سهامی خاص) MC :  شرکت سست و سویی گیسو ایران (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT							EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	
	COMPRESSOR MOTOR CURVE FOR EMERGENCY INSTRUMENT AIR COMPRESSOR							 Netherlands	
Owner Document Number: 17811-54B	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No: 52-98/445	
	BU	20	VD	303	EL	DIG	0100	Rev.: 00	Page 1 of 5

COMPRESSOR MOTOR CURVE FOR EMERGENCY INSTRUMENT AIR COMPRESSOR

 شرکت سست و سویی گیسو ایران  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

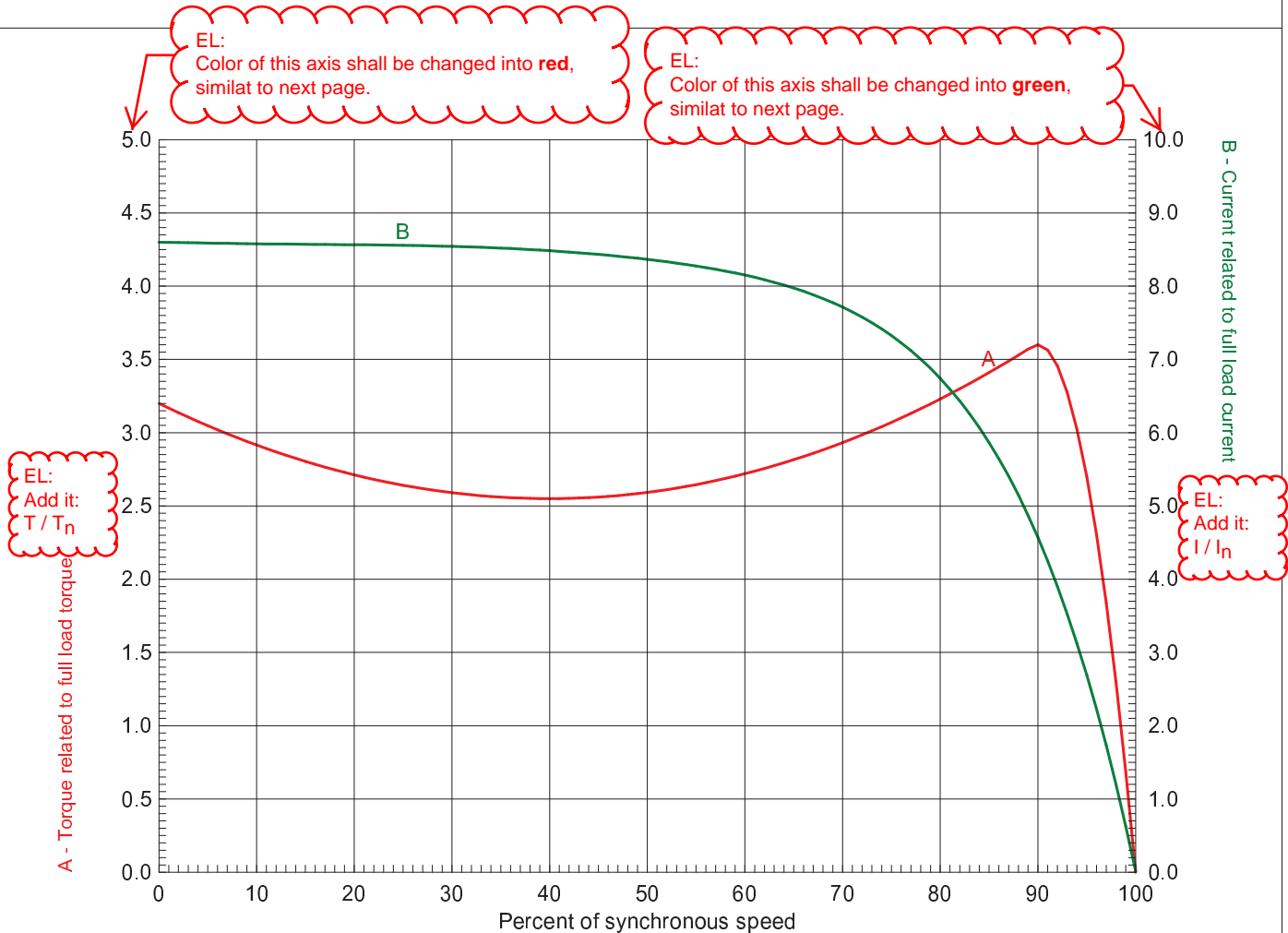


Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : W22Xdb Flameproof - Super Premium Efficiency IE4 (400/690//460V)

Product code : 16354333



Performance : 15 kW (20 HP) 400/690 V 50 Hz 4P 160M/L

Rated current	: 29.2/16.9 A	Moment of inertia (J)	: 0.1813 kgm ²
LRC (p.u.)	: 8.6	Duty cycle	: S1
Rated torque	: 96.9 Nm	Insulation class	: F
Locked rotor torque	: 320 %	Service factor	: 1.00
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1479 rpm	Design	: N

Locked rotor time 100% : 19 s (hot) 34 s (cold)
 Load inertia (J=GD²/4) : 0.18125 kgm²

Rev.	Summary of changes	Performed	Checked	Date
Performed by	ydamhuis	345288/2021-A1		
Checked by	AUTOMATICO	Page	Revision	
Date	10/12/2021	3/6	0	

LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

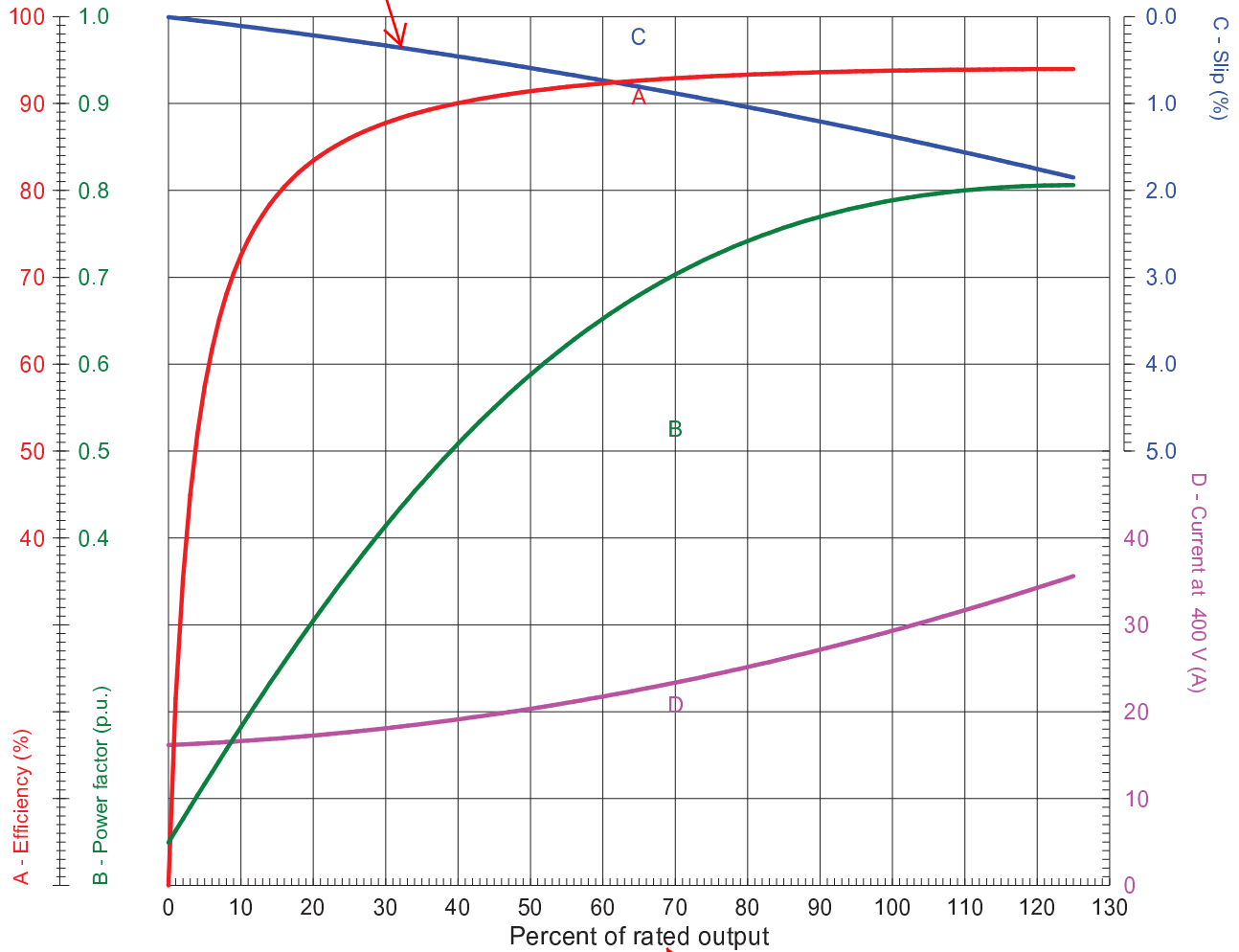
Product line

: W22Xdb Flameproof - Super Premium Efficiency IE4 (400/690//460V)

Product code

: 16354333

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.

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 Breakdown torque : 360 %
 Rated speed : 1479 rpm

Moment of inertia (J) : 0.1813 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : N

EL:
 Refer to comments on previous pages.

Rev.	Summary of changes	Performed	Checked	Date
Performed by	ydamhuis	345288/2021-A1		
Checked by	AUTOMATICO	Page	Revision	
Date	10/12/2021	4/6	0	

THERMAL LIMIT CURVE

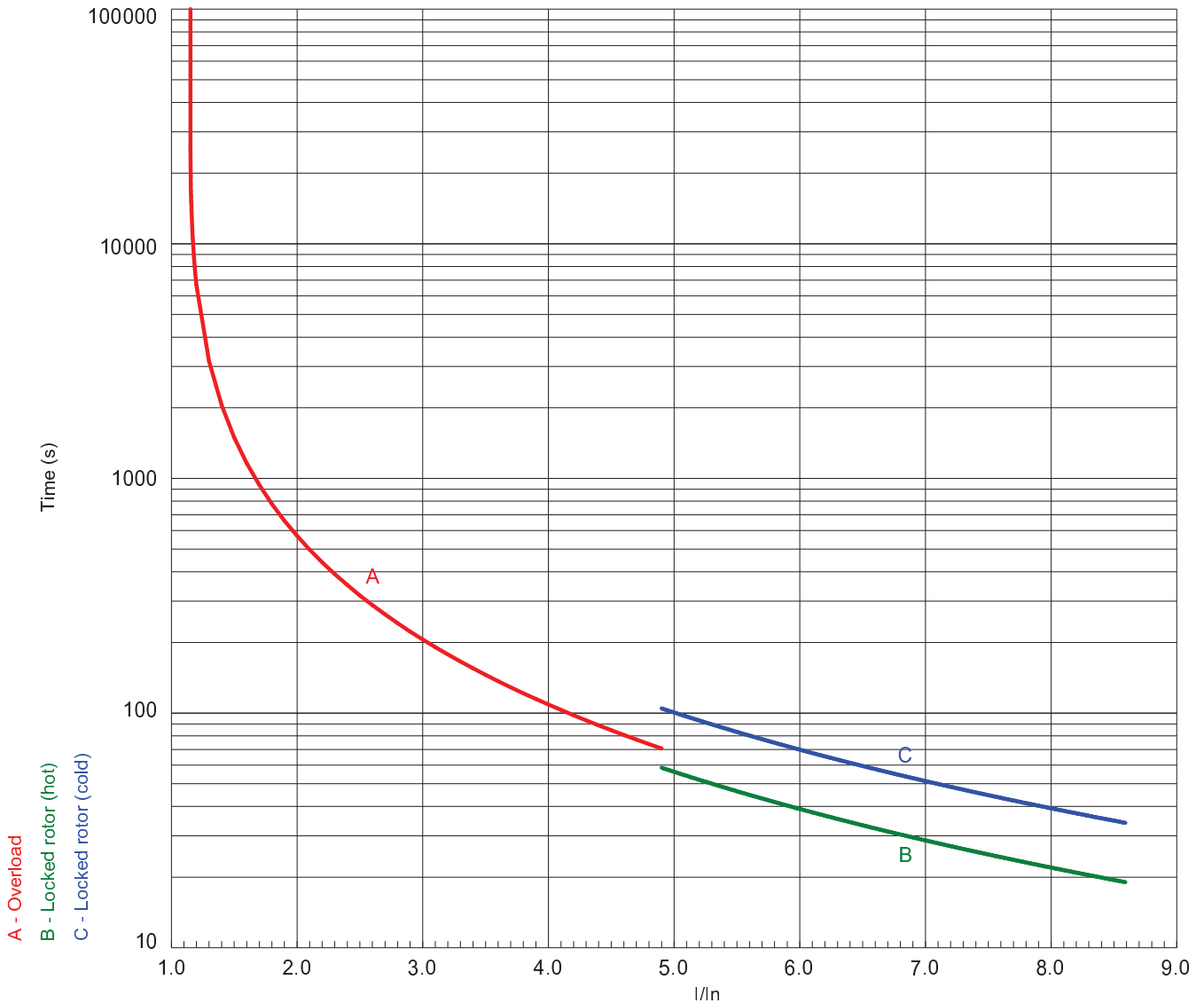


Three Phase Induction Motor - Squirrel Cage

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LRC (p.u.)	: 8.6	Duty cycle	: S1
Rated torque	: 96.9 Nm	Insulation class	: F
Locked rotor torque	: 320 %	Factor	: 1.00
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1479 rpm	Design	: N

EL:
Refer to comments on previous pages.

Heating constant : 27.6 min
Cooling constant : 82.8 min

Rev.	Summary of changes	Performed	Checked	Date
Performed by	ydamhuis	345288/2021-A1		
Checked by	AUTOMATICO	Page	Revision	
Date	10/12/2021	5/6	0	