

ABB BALDOR RELIANCE III

Customer information packet

P18G2701

5HP, 1725RPM, 3PH, 60HZ, 180TY, TEXP, V1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPNV
Frame	180TY
Frame Material	Iron
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	5.000 @ 60 HZ
Phase	3
Voltage @ Frequency	460 V @ 60 HZ 230 V @ 60 HZ
Agency Approvals	UL CSA CCSA US
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Cable Length	25 FOOT
Current @ Voltage	14.0 A @ 230 V 7.00 A @ 460 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	15 MIN
Haz Area Temp Code	T3C
Heater Indicator	No Heater
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Motor Standards	NEMA
Motor Type	M
Mounting Arrangement	V1
Number of Poles	4
Overall Length	26.66 IN
Pulley End Bearing Type	Ball

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	NLA/A
Elec. spec.	E02261H AG024
Layout	066930-500
Eff. date	04-24-2024
CD Diagram	416820-001
Poles	04
Leads	
Proprietary	False
Created date	04-09-2015

Pulley Face Code	P-Base
Service Factor	1.15
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MN											
CAT NO			SPEC NO.		P18G2701						
HP	5	AMPS	14.0/7.00		VOLTS		230/460		DESIGN	B	
FRAME SIZE	X0180TY		RPM	1725	HZ	60	AMB	40	SF	1.15	
D.E. BRG.	50BC02JPP30A			PH	3	DUTY	15MIN		INSUL	F	
O.D.E. BRG.	25BC02JPG30A			TYPE	P	ENCL	TENV		CODE	H	
SER.NO.				POWER FACTOR			NEMA-NOM-EFF				
				MAX CORR KVAR			GUARANTEED EFFICIENCY				
				NEMA NOM/CSA QUOTED EFF @						100% LOAD	
				MOTOR WEIGHT				LBS.			
	*15 MIN IN AIR ;SUB. IN										
	SEWAGE / WATER ONLY ONLY;										
	FINAL. CONN AT 230V										

000613007RC			
CLASS I GROUP	C D X	NO.	
CLASS II GROUP	X X X		
OPERATING TEMP CODE	T3C		

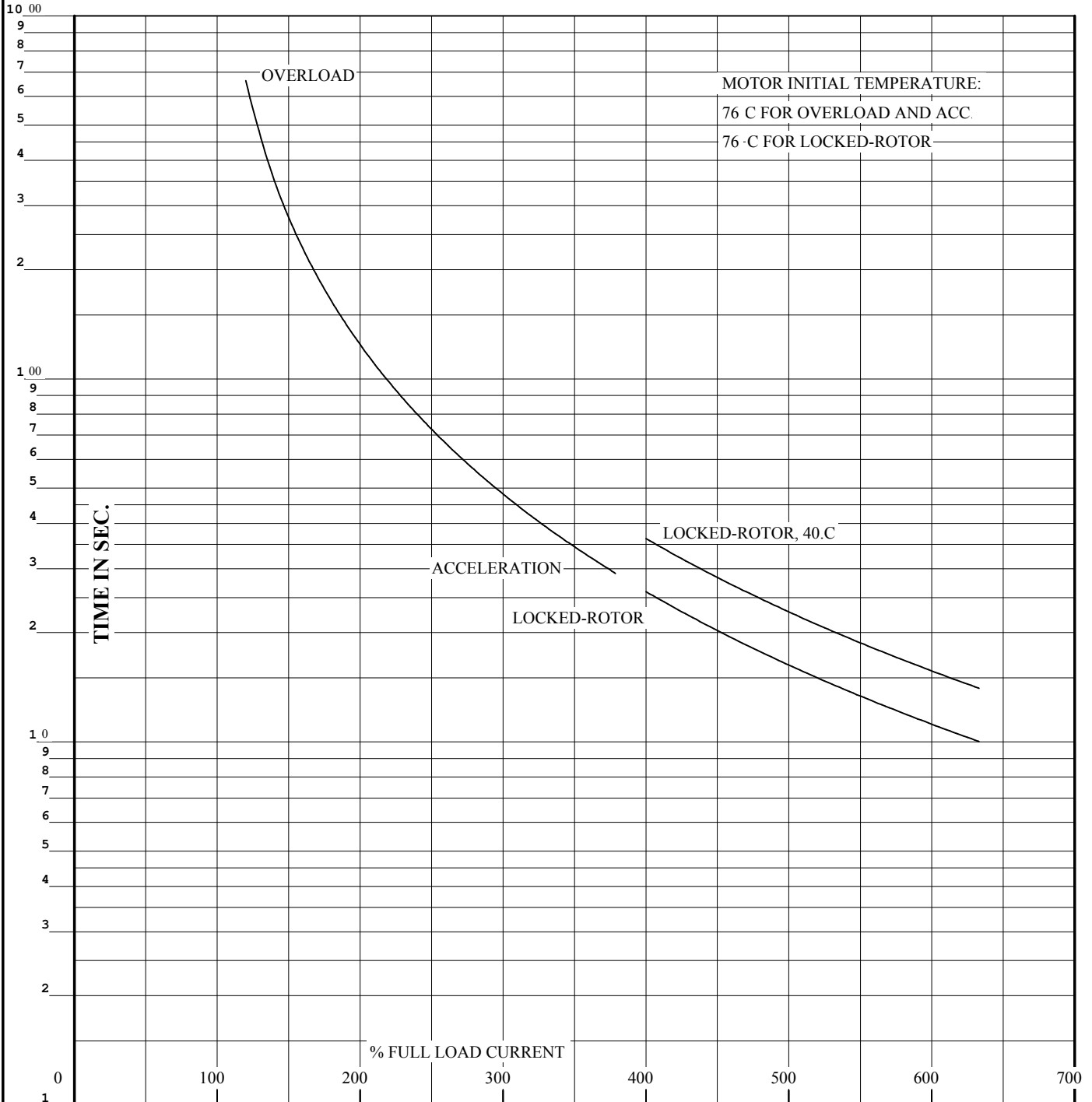
000613007MN

CAT NO		SPEC NO.	P18G2701							
HP	5	AMPS	14.0/7.00	VOLTS	230/460	DESIGN	B			
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		POWER FACTOR		NEMA-NOM-EFF						
		MAX CORR KVAR		GUARANTEED EFFICIENCY						
		NEMA NOM/CSA QUOTED EFF @		100% LOAD						
SER.NO.		MOTOR WEIGHT		LBS.						
	*15 MIN IN AIR ;SUB. IN									
	SEWAGE / WATER ONLY ONLY;									
	FINAL. CONN AT 230V									

REL. S.O. **S1201091736**
FRAME **180TY**
HP **5**
TYPE **P**
PHASE/HERTZ **3/60**

RPM **1725**
VOLTS **230/460**
AMPS **14.0/7.0**
DUTY **CONT**
AMB °C/INSUL **40/F**

S.F. **1.00**
NEMA DESIGN **B**
CODE LETTER **H**
ENCLOSURE **TENV**
E/S **536341**

ROTOR **418424-37BE**
TEST S.O. **TYPICAL DATA**
TEST DATE **---**
STATOR RES. @ 25 °C **.932/3.72**
OHMS (BETWEEN LINES)


THERMAL LIMIT CURVE

REMARKS:

SUBMERSIBLE MOTOR

*15MIN IN AIR, CONT IN LIQUID

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY D. M. BYRD
CK. BY T. S. WILLIAMS
APP. BY D. M. BYRD
DATE 10/12/04
**A-C MOTOR
PERFORMANCE
CURVES**
**E02261-HAG024/
S1201091736**
ISSUE DATE 07/15/16 Page 7 of 11

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
S1201091736	180TY	5	P	3/60	1725	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
14.0/7.0	CONT	40/F	1.00	B	H	TENV
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
536341	418424-37BE	---	---	.932/3.72		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	INPUT KW	% POWER FACTOR	% EFFI- CIENCY
NO LOAD	0	2.7	1800	.444	20.5	0
1/4	1.25	3.3	1781	1.41	54.1	66.3
2/4	2.50	4.2	1765	2.42	71.9	77.0
3/4	3.75	5.5	1747	3.50	79.9	79.9
4/4	5.00	7.0	1727	4.65	83.9	80.2
5/4	6.25	8.6	1703	5.90	86.1	79.1
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	192	29.2	40.0		
PULL UP	350	173	26.3	38.0		
BREAKDOWN	1400	272	41.3	25.1		
FULL LOAD	1727	100	15.2	7.0		
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA SUBMERSIBLE MOTOR *15MIN IN AIR, CONT IN LIQUID						
		DR. BY	D. M. BYRD	A-C MOTOR E02261-HAG024/ PERFORMANCE S1201091736 DATA ISSUE DATE 07/15/16		
		CK. BY	T. S. WILLIAMS			
		APP. BY	D. M. BYRD			
		DATE	10/12/04			

REL S.O. **S1201091736**

RPM **1725**

S.F. **1.00**

ROTOR **418424-37BE**

FRAME **180TY**

VOLTS **230/460**

NEMA DESIGN **B**

TEST S.O. **TYPICAL DATA**

HP **5**

AMPS **14.0/7.0**

CODE LETTER **H**

TEST DATE **---**

TYPE **P**

DUTY **CONT**

ENCLOSURE **TENV**

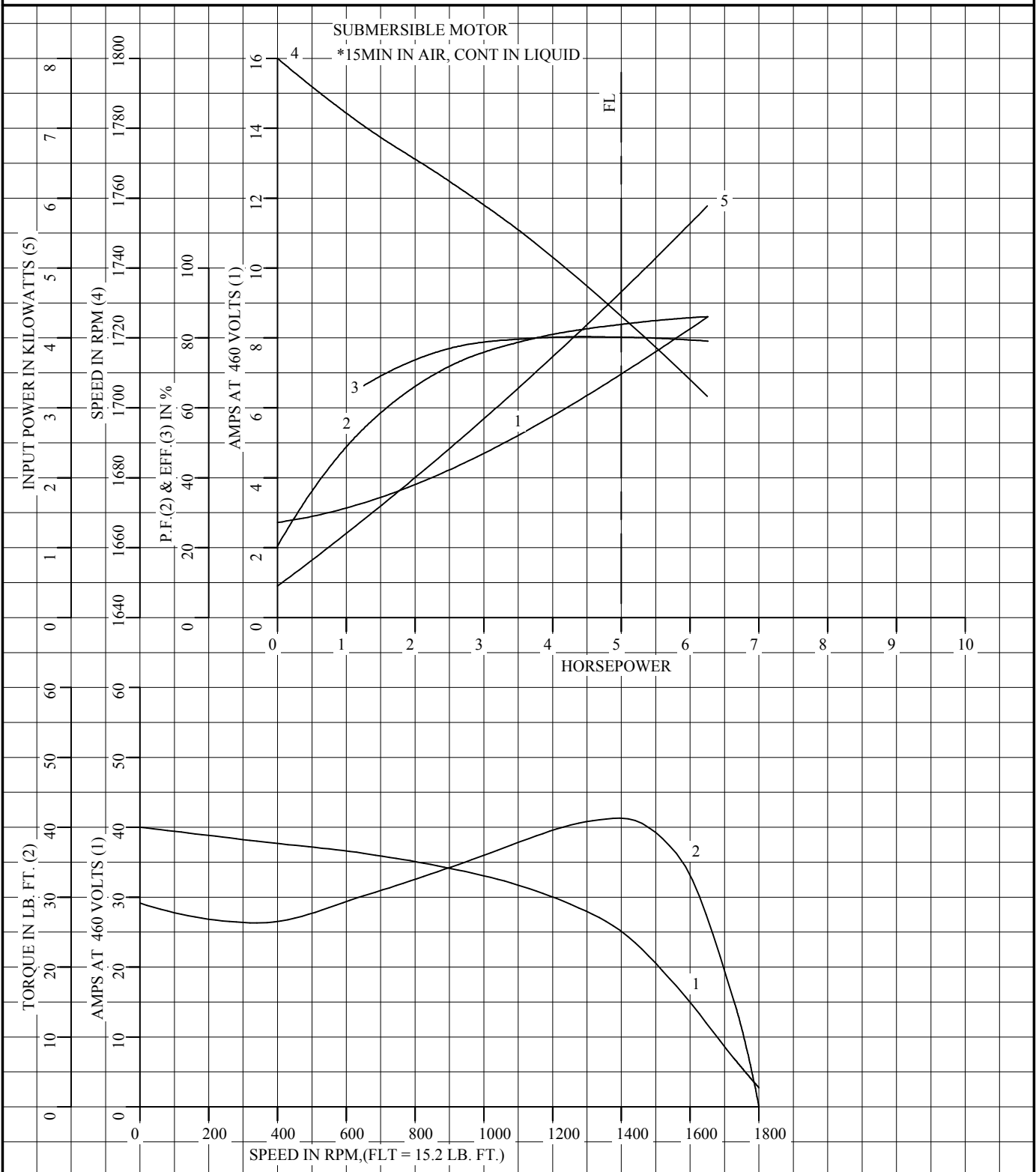
STATOR RES. @ 25 °C **.932/3.72**

PHASE/HERTZ **3/60**

AMB °C/INSUL **40/F**

E/S **536341**

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

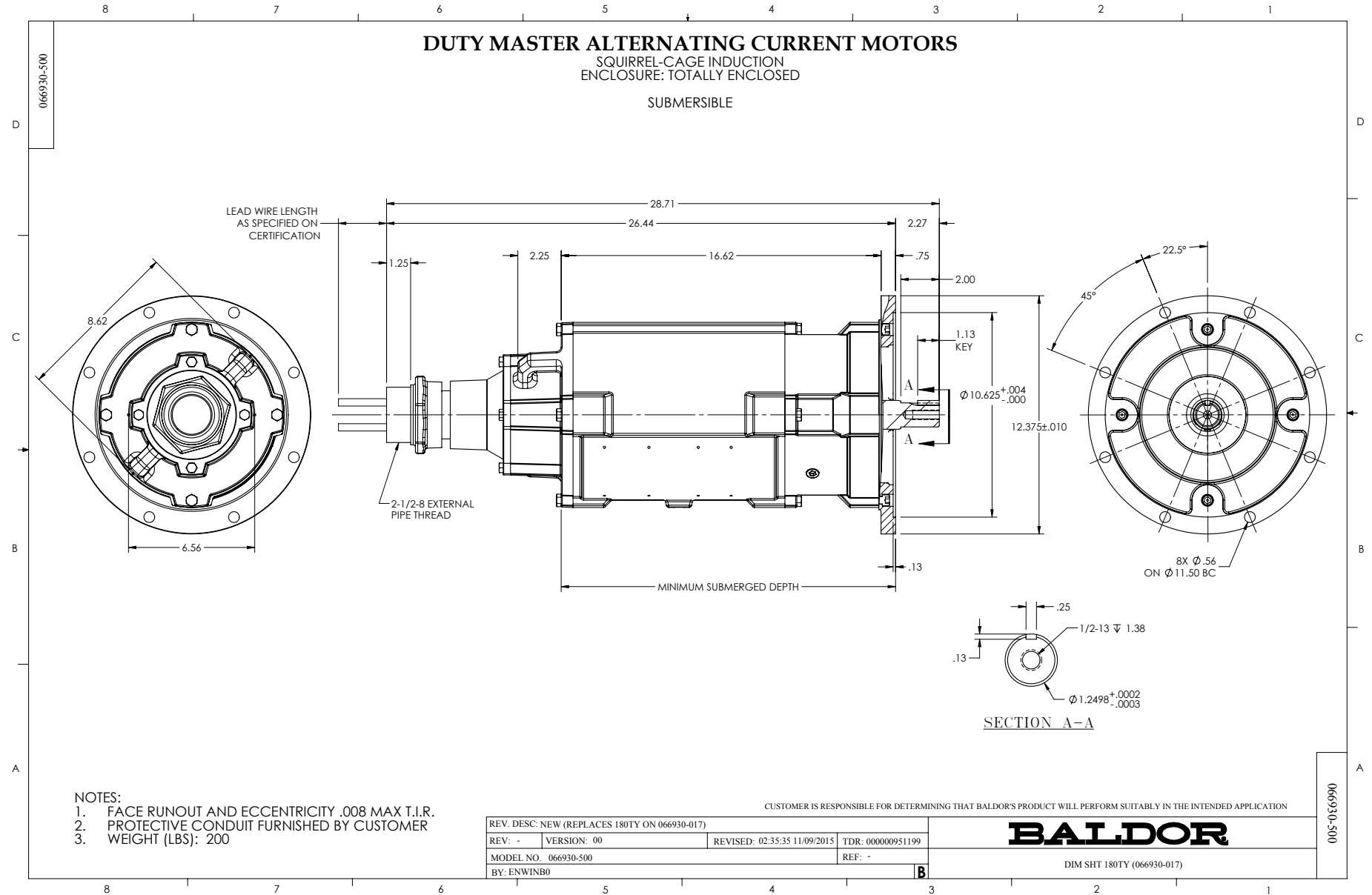
BALDOR
A MEMBER OF THE ABB GROUP

DR. BY D. M. BYRD
CK. BY T. S. WILLIAMS
APP. BY D. M. BYRD
DATE 10/12/04

**A-C MOTOR
PERFORMANCE
CURVES**

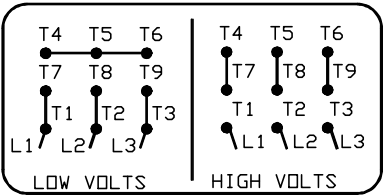
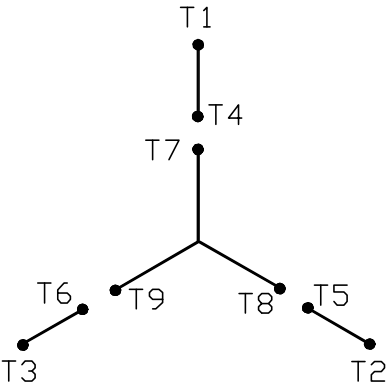
**E02261-HAG024/
S1201091736**

ISSUE DATE 07/15/16 Page 9 of 11



416820-001

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD Y CONNECTED



(N. P. 1575-A)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE

REV. LTR: A

VERSION: 01

TDR: 000001009382

FILE: \MGA\00000\659

REVISED: 10: 33: 07 12/21/2016

BY: MGHMTT

MTL: -



BALDOR

CONN DIAG - STANDARD 9 LEAD, Y CONNECTED

SH 1 of 1

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