ABB BALDOR RELIANCE

Customer information packet

EMM4103

18.5KW, 1760RPM, 3PH, 60HZ, D180M, 1050M, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	D180M
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	18.500 KW @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	C UR US
	CURUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	31.000 A @ 460.0 V
	62.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	Y
Type	AC
Mech. spec.	10E377
Base	
Status	PRD/A
Elec. spec.	10WGY546
Layout	10LYE377
Eff. date	06-20-2024
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	03-22-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	31.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	1050M
Mounting Arrangement	B3
Number of Poles	4
Overall Length	27.48 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.891 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2	None

Nameplate

NP1159L							
CAT.NO.							
SPEC.	10E377Y546G1						
IEC FRAME	D180M	**KW**	18.5				
VOLTS	230/460						
AMP	62/31						
RPM	1775	**ENCL**	TEFC				
HZ	60	**PH**	3	**CL**	F		
SER.F.	1.15	**DES**	A	**CODE**	H		
NEMA-NOM-EFF	93.6	**I.P.**	54				
RATING	40C AMB-CONT						
CC	010A						
DE	6311	**ODE**	6309				
SER. #							

AC Induction Motor Performance Data
Record # 35487
Typical performance - not guaranteed values

Winding: 10WGY546-R002	**Type:** 1050M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (KW)			18.5	**Full Load Torque**	72.9 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			64-62/31	**Breakdown Torque**	275 LB-FT
R.P.M.			1760	**Pull-up Torque**	119 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	138 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	212 A
Service Factor (S.F.)			1.15	**No-load Current**	13.6 A
NEMA Nom. Eff.	93.6	**Power Factor**	81	**Line-line Res. @ 25ºC**	0.242 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	52°C
S.F. Amps				**Temp. Rise @ S.F. Load**	61°C
				Locked-rotor Power Factor	31
				Rotor inertia	3.99 LB-FT2

Load Characteristics 460 V, 60 Hz, 18.5 KW

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	65	76	81	84	85	83
Efficiency	87.3	91.8	93.1	93.7	93.3	92.3	93.4
Speed	1793	1787	1782	1776	1769	1760	1772
Line amperes	15.3	19.1	24.4	30.6	36.9	45.4	34.3

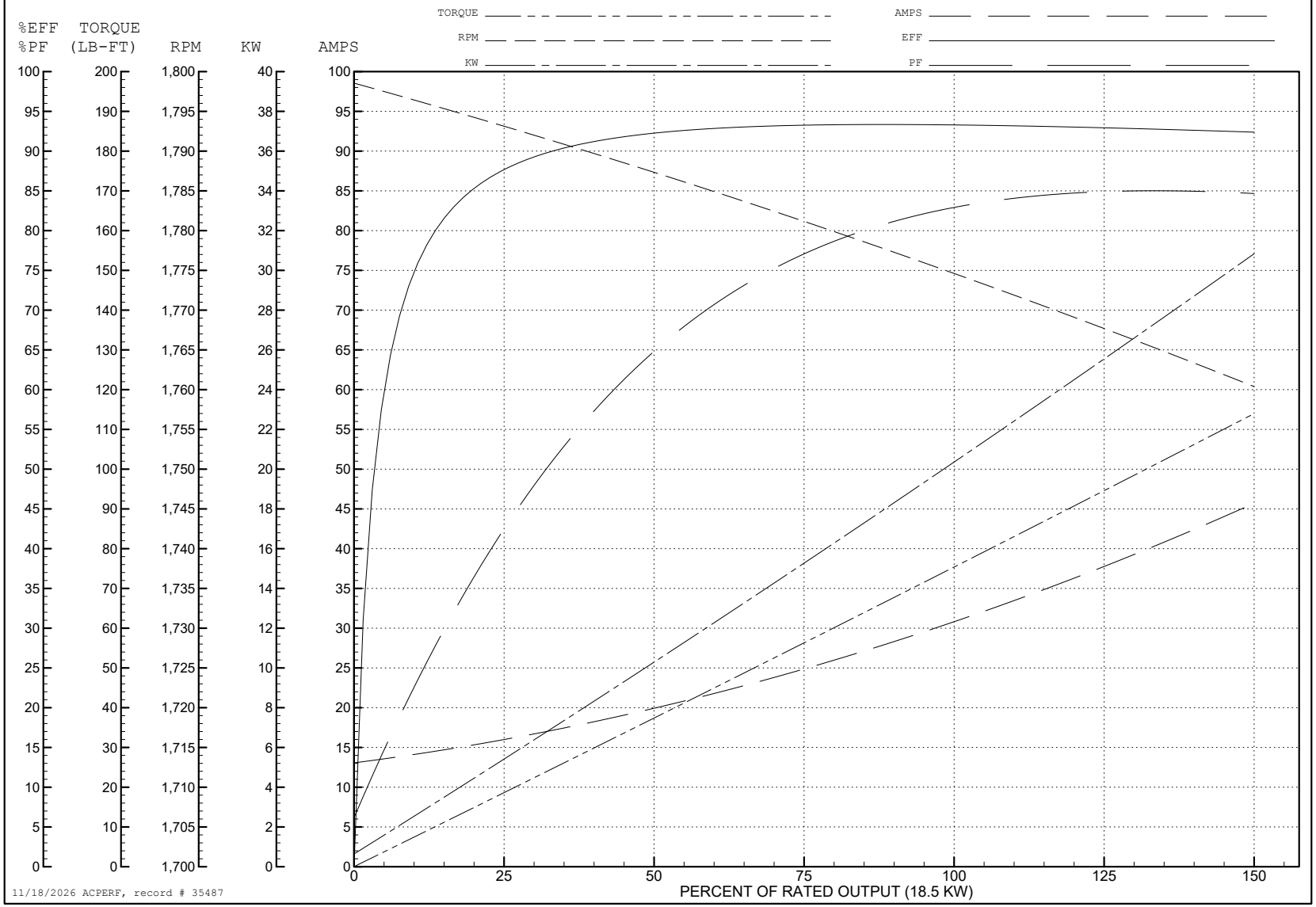
ABB Motors and Mechanical Inc.

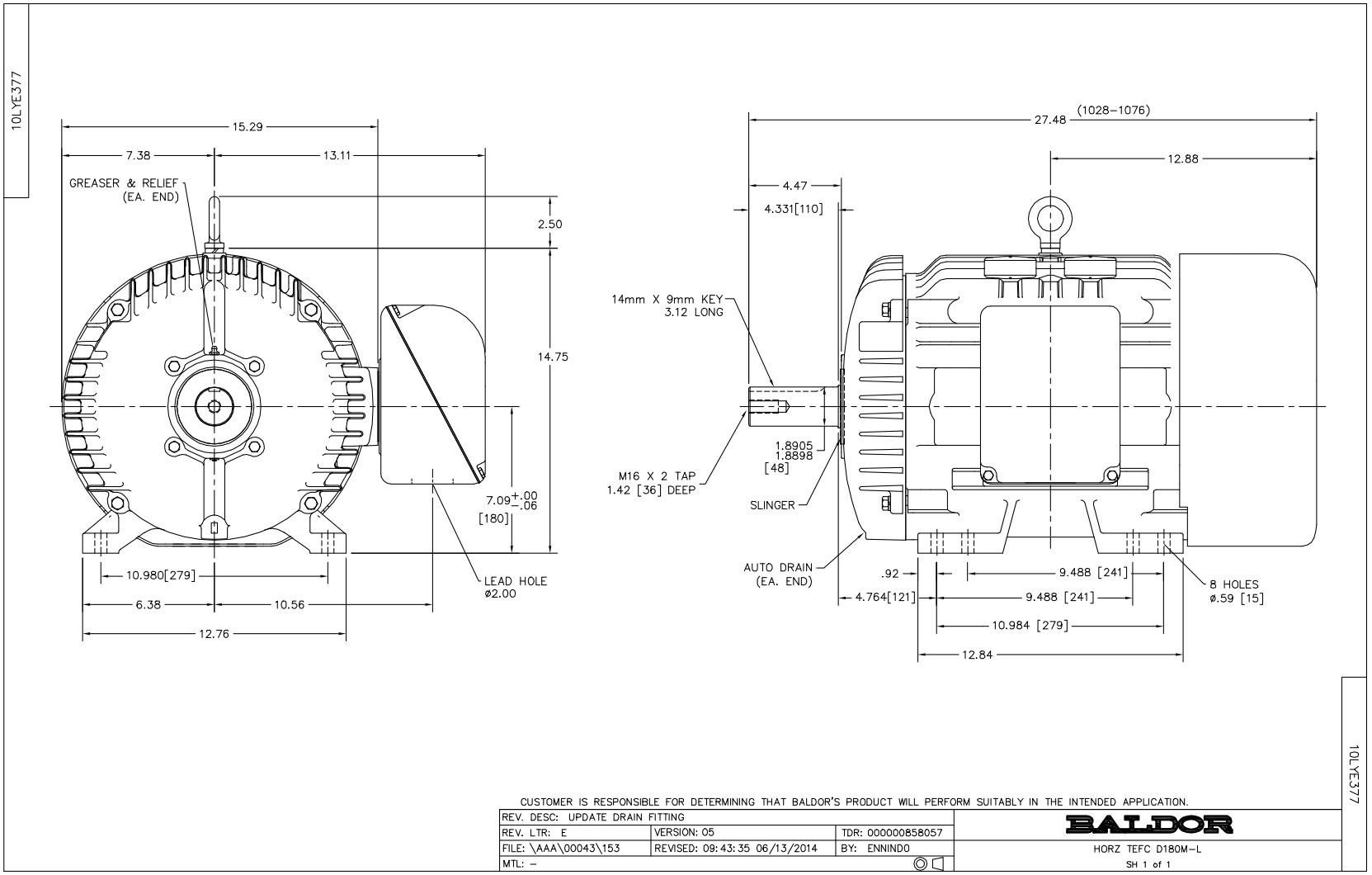
WINDING # 10WGY546

18.5 KW 3 PH 60 HZ 1760 RPM 460 V 1050M

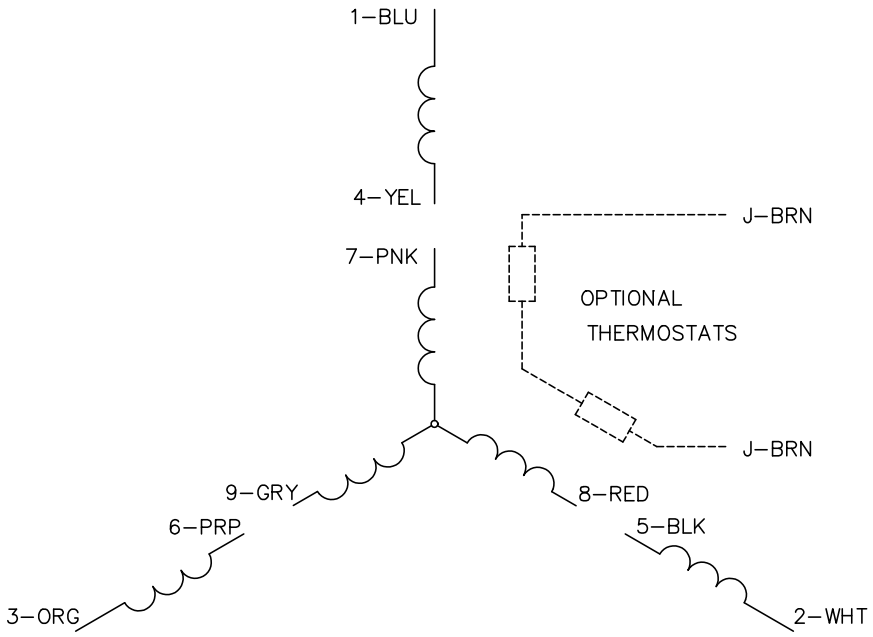
Typical performance - not guaranteed values.

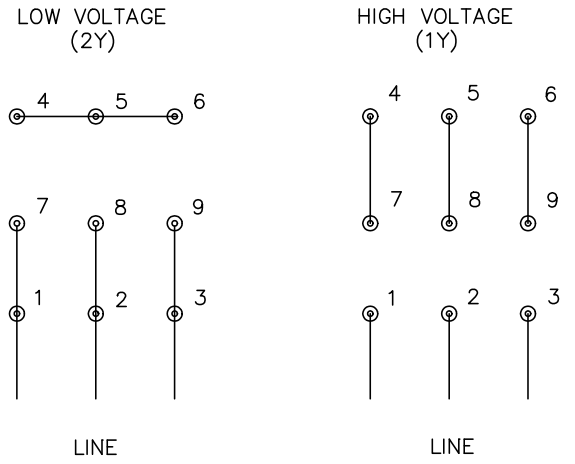
TORQUES(LB-FT): PO=275 PU=119 LR=138 LRA=212




10LYE377
15.29
7.38
13.11
GREASER & RELIEF
(EA. END)
2.50
14.75
7.09 +.00 -.06
[180]
10.980[279]
6.38
10.56
12.76
LEAD HOLE
ø2.00
(1028–1076)
27.48
12.88
4.47
4.331[110]
14mm X 9mm KEY
3.12 LONG
1.8905
1.8898
[48]
M16 X 2 TAP
1.42 [36] DEEP
SLINGER
AUTO DRAIN
(EA. END)
.92
9.488 [241]
4.764[121]
9.488 [241]
10.984 [279]
12.84
8 HOLES
ø.59 [15]
10LYE377
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATE DRAIN FITTING
REV. LTR: E
VERSION: 05
TDR: 000000858057
FILE: \AAA\00043\153
REVISED: 09:43:35 06/13/2014
BY: ENNINDO
MTL: –
BALDOR
HORZ TEFC D180M–L
SH 1 of 1

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS