ABB BALDOR RELIANCE

Customer information packet

ECTM4100T

15 AIR OVERHP, 1175RPM, 3PH, 60HZ, 284T, 1046
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEAO
Frame	284T
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	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	UR
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	42.000 A @ 208.0 V
	42.000 A @ 230.0 V
	21.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	S
Type	AC
Mech. spec.	10K189
Base	
Status	PRD/A
Elec. spec.	10WGY561
Layout	10LYK189
Eff. date	10-08-2025
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	04-22-2016

Heater Indicator	No Heater
High Voltage Full Load Amps	21.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	25.63 IN
Power Factor	73
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1175 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP2178									
CAT.NO.	ECTM4100T								
SPEC.	10K189Y561G1								
HP	15 AIR OVER								
VOLTS	230/460								
AMP	42/21								
RPM	1175								
FRAME	284T	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	H	**DES**	A	**CL**	F		
NEMA-NOM-EFF	91.7	**PF**	73						
RATING	40C AMB-CONT								
CC									
DE	6311	**ODE**	6309						
ENCL	TEAO	**SN**							
	1900 FPM @ 360CFM								

AC Induction Motor Performance Data
Record # 66702
Typical performance - not guaranteed values

Winding: 10WGY561-R023	**Type:** 1046M	**Enclosure:** TEAO

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			15 AIR OVER	**Full Load Torque**	66.68 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			42/21	**Breakdown Torque**	213 LB-FT
R.P.M.			1175	**Pull-up Torque**	93.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	114 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	144 A
Service Factor (S.F.)			1.15	**No-load Current**	12.4 A
NEMA Nom. Eff.	91.7	**Power Factor**	73	**Line-line Res. @ 25ºC**	0.502 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	43°C
S.F. Amps				**Temp. Rise @ S.F. Load**	51°C
				Locked-rotor Power Factor	32.9
				Rotor inertia	5.63 lb-ft²

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	32	52	65	72	76	78	75
Efficiency	83	89.4	91.3	91.7	91.4	90.8	91.7
Speed	1196	1193	1189	1185	1181	1177	1181
Line amperes	13.2	15.1	17.9	21.3	25.3	29.6	23.4

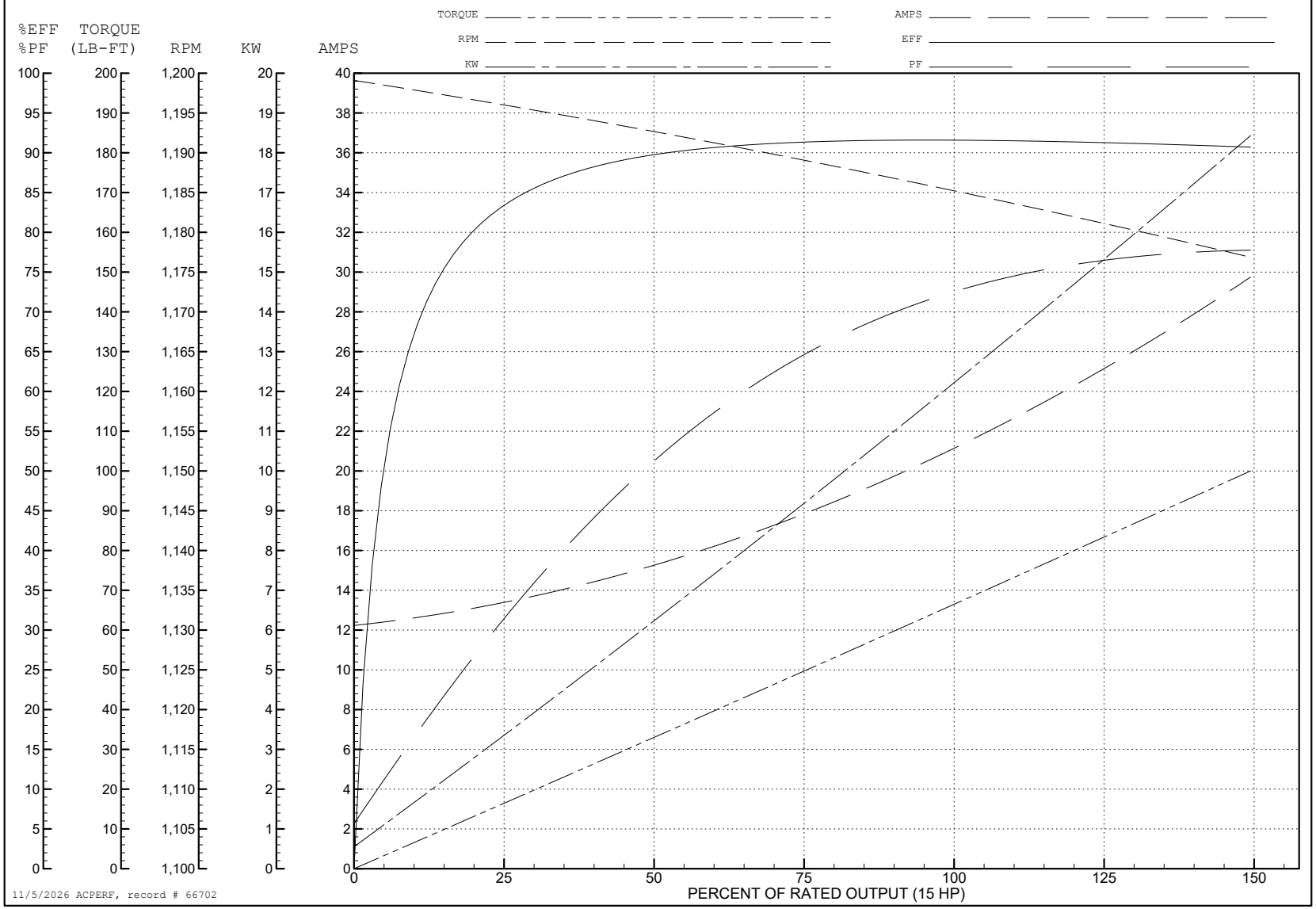
ABB Motors and Mechanical Inc.

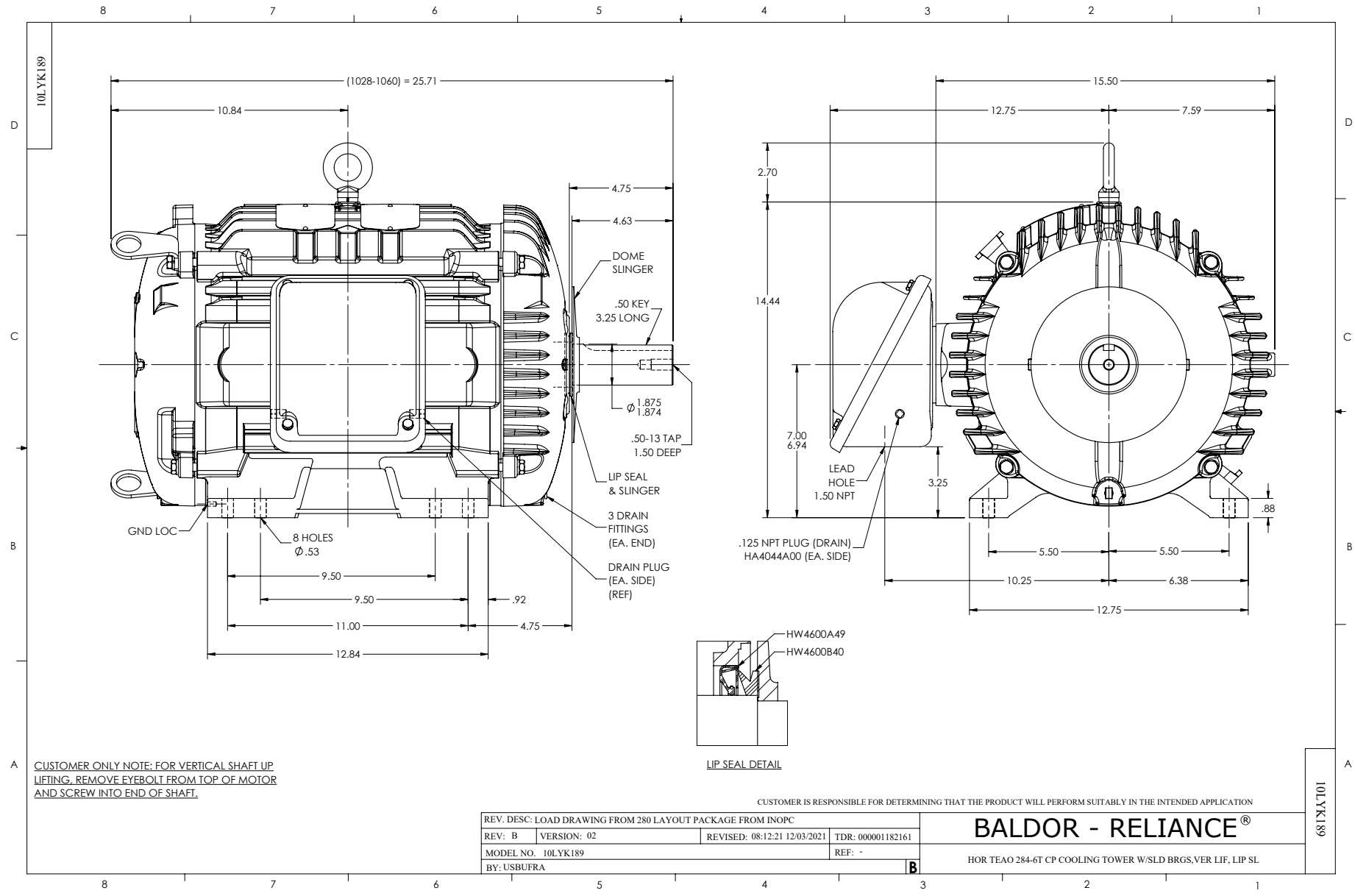
WINDING # 10WGY561

15 HP 3 PH 60 HZ 1175 RPM 460 V 1046M

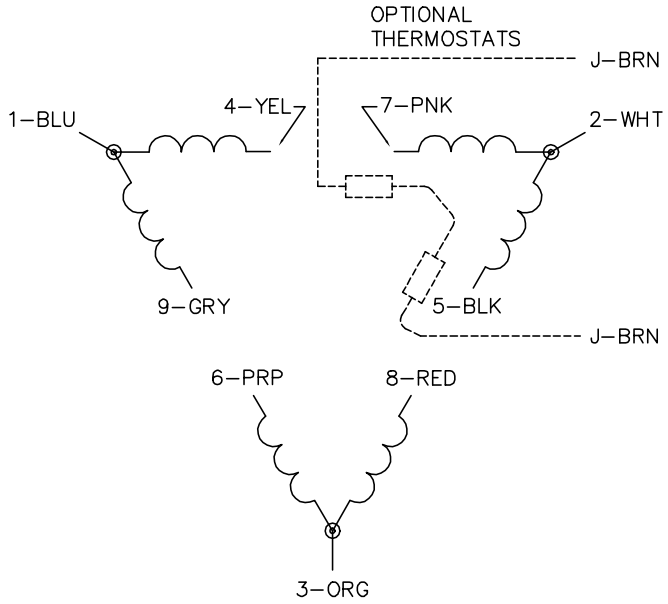
Typical performance - not guaranteed values.

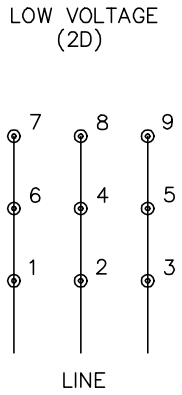
TORQUES(LB-FT): PO=213 PU=93.1 LR=114 LRA=144

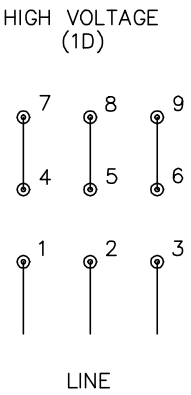



10LYK189
(1028-1060) = 25.71
10.84
4.75
4.63
DOME SLINGER
.50 KEY
3.25 LONG
Ø 1.875
1.874
.50-13 TAP
1.50 DEEP
LIP SEAL
& SLINGER
3 DRAIN
FITTINGS
(EA. END)
DRAIN PLUG
(EA. SIDE)
(REF)
GND LOC
8 HOLES
Ø.53
9.50
9.50
.92
11.00
4.75
12.84
15.50
12.75
7.59
2.70
14.44
7.00
6.94
LEAD
HOLE
1.50 NPT
3.25
.88
.125 NPT PLUG (DRAIN)
HA4044A00 (EA. SIDE)
5.50
5.50
10.25
6.38
12.75
HW4600A49
HW4600B40
LIP SEAL DETAIL
CUSTOMER ONLY NOTE: FOR VERTICAL SHAFT UP LIFTING, REMOVE EYEBOLT FROM TOP OF MOTOR AND SCREW INTO END OF SHAFT.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING FROM 280 LAYOUT PACKAGE FROM INOPC
REV: B
VERSION: 02
REVISED: 08:12:21 12/03/2021
TDR: 000001182161
MODEL NO. 10LYK189
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HOR TEAO 284-6T CP COOLING TOWER W/SLD BRGS,VER LIF, LIP SL
10LYK189

CD0180







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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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