

ABB BALDOR RELIANCE III

Customer information packet

ECTM4100T

15 AIR OVERHP, 1175RPM, 3PH, 60HZ, 284T, 1046

Class - None

Division - Not Applicable

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								

Parts List

Part number	Description	Quantity
SA319385	SA 10K189Y561G1	1.000 ea
RA307078	RA 10K189Y561G1	1.000 ea
10CB1000A132P	SPL KOBX W/1.50 NPT LD & 2 .125 NPT DRAI	1.000 ea
HA4044A00	PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD	2.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
10EP1104A109P	FREP MACH W/EPOXY PRMR,NO GRSR & RELIEF,	1.000 ea
HA7205	"L" SHAPE LIFTING LUG FOR 37,39 & 40 FRA	2.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10EP1105A129P	PUEP MACH W/EPOXY,LESS GRSR,DRAIN @ 3&9	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW4600A49	CR #20643 SINGLE LIP SEAL	1.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
HW4600G54	DOME SLINGER, 7.125 OD X 1.870/1.810 ID	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
10CB1503P	CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 ea

LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	3.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	3.000 ea
MG1025G05	WILKOFAS, 789.227, MED. GRAY CHAR. MET.	0.070 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP2178	SS CP SUPER-E UL CC	1.000 ea
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

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. @ 25°C		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

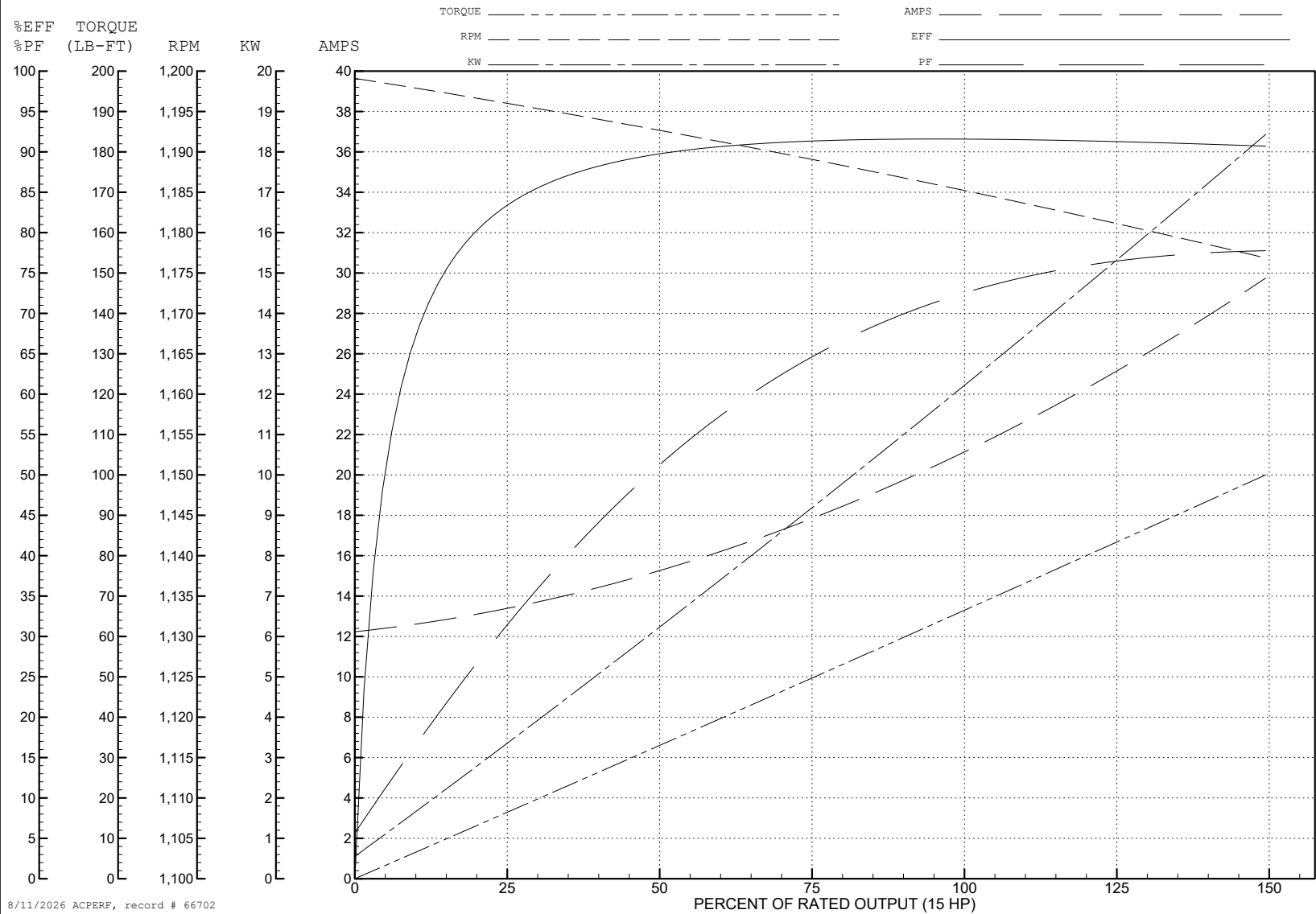
ABB Motors and Mechanical Inc.

WINDING # 10WGY561

Typical performance - not guaranteed values.

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

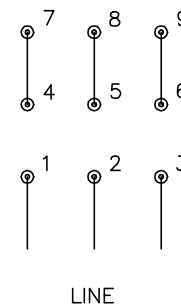
TORQUES (LB-FT): PO=213 PU=93.1 LR=114 LRA=144





CD0180


 LOW VOLTAGE
(2D)

 HIGH VOLTAGE
(1D)

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.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

CD0180