

ABB BALDOR RELIANCE III

Customer information packet

ECTM4104T

30 AIR OVERHP, 1760RPM, 3PH, 60HZ, 286T, 1056

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	286T
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	30.000 HP @ 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	UR CSA CSA EEV
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	76.000 A @ 230.0 V 38.000 A @ 460.0 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
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	T
Type	AC
Mech. spec.	10K189
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYK189
Eff. date	06-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	08-17-2015

High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Vertical 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	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.63 IN
Power Factor	80
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	1760 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.	ECTM4104T								
SPEC.	10K189Y538G1								
HP	30 AIR OVER								
VOLTS	230/460								
AMP	76/38								
RPM	1760								
FRAME	286T	HZ		60	PH		3		
SER.F.	1.15	CODE	J	DES	A	CL	F		
NEMA-NOM-EFF	93.6	PF	80						
RATING	40C AMB-CONT								
CC									
DE	6311	ODE		6309					
ENCL	TEAO	SN							
	1900 FPM @ 360CFM								

Parts List

Part number	Description	Quantity
SA306145	SA 10K189Y538G1	1.000 ea
RA293381	RA 10K189Y538G1	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 # 35485

Typical performance - not guaranteed values

Winding: 10WGY538-R005				Type: 1056M		Enclosure: TEAO	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		30 AIR OVER		Full Load Torque		88.7 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		76/38		Breakdown Torque		330 LB-FT	
R.P.M.		1760		Pull-up Torque		142 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		178 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		270 A
Service Factor (S.F.)		1.15		No-load Current		17.9 A	
NEMA Nom. Eff.		93.6	Power Factor	80	Line-line Res. @ 25°C		0.19377 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		64°C	
S.F. Amps				Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		31	
				Rotor inertia		4.47 LB-FT2	

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	73	80	82	85	81
Efficiency	87.6	92.3	93.5	93.7	93.4	92.9	93.5
Speed	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
Line amperes	19.8	24.3	30.7	37.6	45.6	55.2	42.4

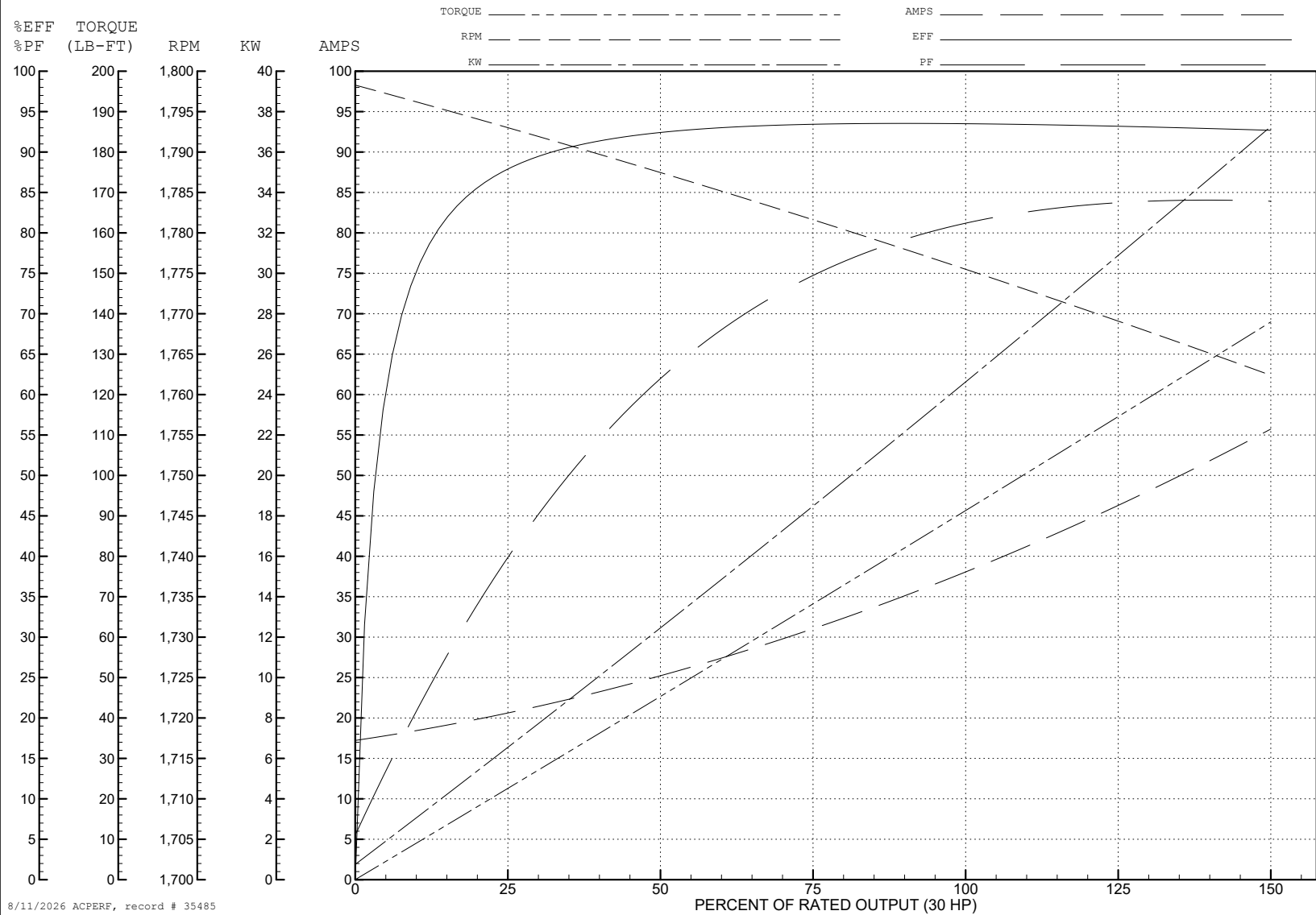
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

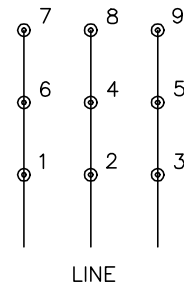
TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270



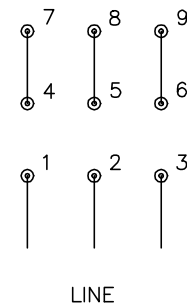
CD0180



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.

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: ENBRIRO

MTL: -



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1