

ABB BALDOR RELIANCE III

Customer information packet

VLECP4104T

30HP, 1760RPM, 3PH, 60HZ, 286LP, 1056M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286LP
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	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1.3
Current @ Voltage	78.000 A @ 208.0 V 76.000 A @ 230.0 V 38.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	Q
Type	AC
Mech. spec.	10M69
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYM069
Eff. date	06-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	08-24-2017

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
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	32.44 IN
Power Factor	80
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Thrust
Pulley Face Code	P-Base
Pulley Shaft Indicator	P-Base Groove & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.750 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
NP3241

CAT.NO.	VLECP4104T			P/N					ENCLOSURE	TEFC			
SPEC.	10M069Y538G1		CC	010A	FRAME	286LP		S/N					
HP	30			CLASS	F	HZ	60	DES	A				
RPM	1760			RPM MAX	2700		PH	3	KVA-CODE	J			
VOLT	230/460			MOTOR WEIGHT			549						
AMP	76/38			SER.F.	1.15	PF	80	ODE BRG	6309	DE BRG	QJ213		
RATING	40C AMB-CONT			NEMA-NOM-EFF			93.6		GREASE	POLYREX EM			
							INV.TYPE	PWM					
TEMP CODE	T3C	INVERTER-TEMP-CODE			180								
TEMP =	160	C HP FR	60	C HP TO	90								
CT HZ FROM	1.3	CT HZ TO		60									
HTR-VOLTS		HTR-AMPS		HTR-WATTS		MAX. SPACE HEATER TEMP.				VT HZ FROM	O	VT HZ TO	60

Parts List

Part number	Description	Quantity
SA343822	SA 10M069Y538G1	1.000 ea
RA332292	RA 10M069Y538G1	1.000 ea
10CB1000A16P	KOBX, MACH 2.00 NPT W/#26 DRAIN W/PRIMER	1.000 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
HA4017A11	1/8 X 2.75 GREASE EXT (F/S)	1.000 ea
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
10XN3816S28	3/8-16 X 1 3/4 HEX HD CAP SCREW, STAINLE	4.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	4.000 ea
HA6387P	EYE BRACKET PRIMED	2.000 ea
HW4600B42	V-RING SLINGER 2.375 X 3.070 X .28 VITON	1.000 ea
10FH1007A10P	FAN HOUSING MODEL 310 TEFC MOTORS W/EPOX	1.000 ea
HA1005A26	SLINGER, OD 3.00, ID 1.75, 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10XN2520S32	1/4-20 X 2 HEX HEAD SS	2.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	2.000 ea
10XN3118S56	5/16-18 X 3.500 HEX HD SS	4.000 ea
HW2501H22	KEY, 1/2 SQ X 2.500	1.000 ea
HW1001S31	WASHER, 5/16 SPLT LK, STAINLESS STEEL	4.000 ea
10EP1503A02P	SPL PU EP 310 ENCL 6213 BRG 284-6TP W/EP	1.000 ea
10XN3816S28	3/8-16 X 1 3/4 HEX HD CAP SCREW, STAINLE	4.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	4.000 ea
10XN3816S24	3/8-16X1 1/2 HX HD CAP SS	3.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	3.000 ea
12FH1500A01P	MACH DRIP COVER 310-312 MTRS	1.000 ea
10XN3816S36	3/8-16 X 2 1/4 HEX HD CAPSCREW SS	4.000 ea

HW1000S38	3/8 FLAT WASHER SS	4.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	4.000 ea
10XN3816S20	3/8-16 X 1.250 HEX HD CAP SCREW, STAINLE	4.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	4.000 ea
XY3816S12	3/8-16 HEX FINISHED NUT SS	4.000 ea
10CB1503P	CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.001 ea
10XN2520S16	1/4-20 X 1 HEX HEAD SS	4.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	4.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
10EP1104A41LP5	FREP, MACH W/EPOXY PRIMER & PAINT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	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
NP3241	SS SUPER-E INV UL CSA-EEV PREM CC	1.000 ea
18PA1057	PKG. GRP., VERT 30.5 BODY,MAX SH 4-7/8"	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 66469

Typical performance - not guaranteed values

Winding: 10WGY538-R042			Type: 1056M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		30		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	Starting Current		270 A
Service Factor (S.F.)		1.15		No-load Current		17.9 A
NEMA Nom. Eff.		93.6	Power Factor	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		30.9
				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

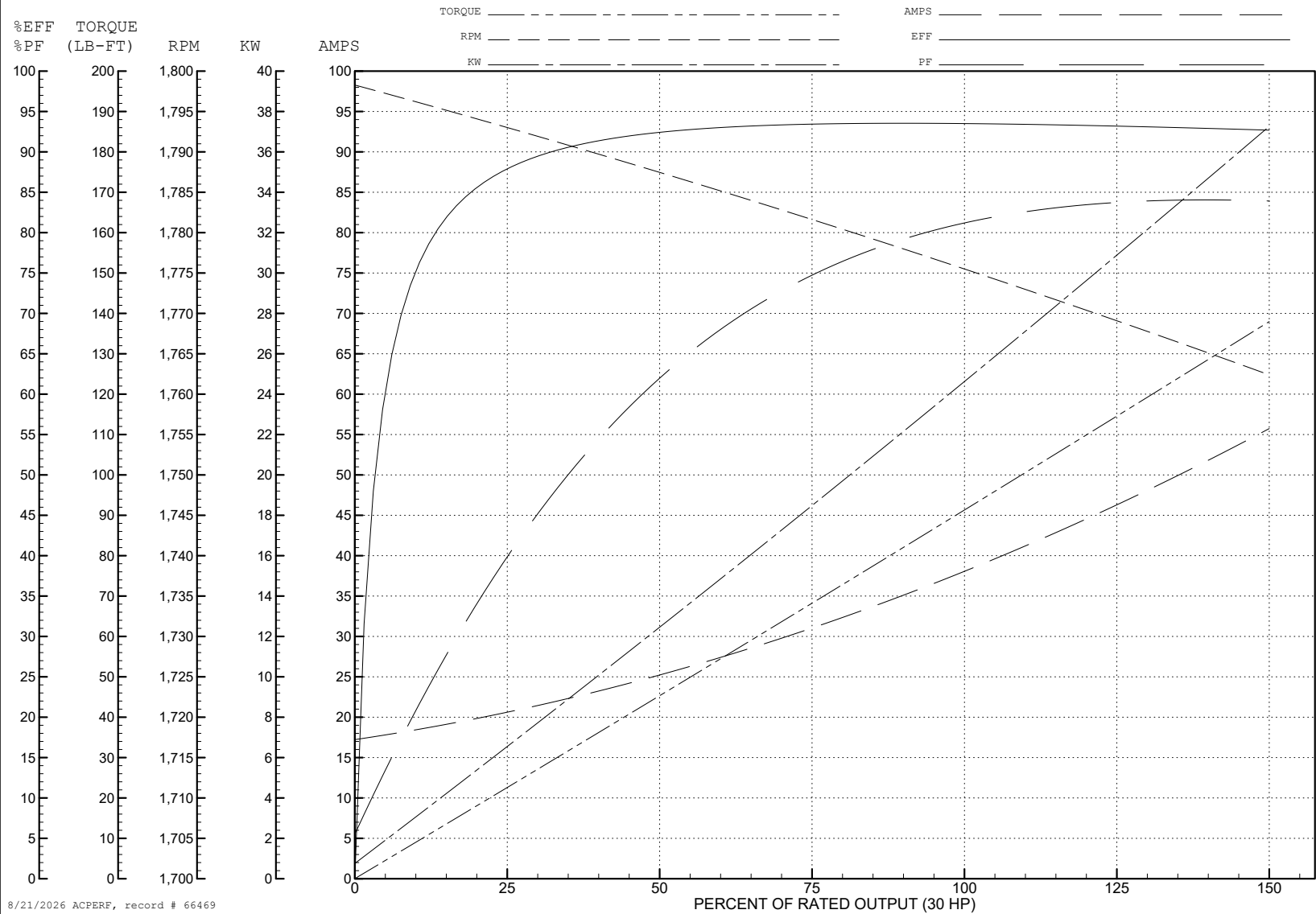
ABB Motors and Mechanical Inc.

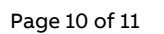
WINDING # 10WGY538

Typical performance - not guaranteed values.

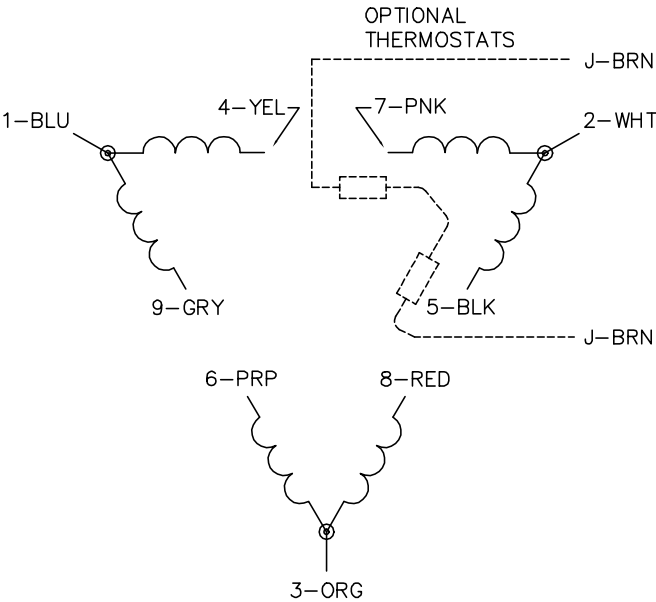
30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

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

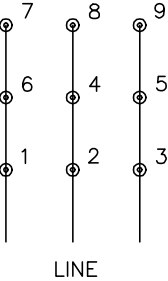




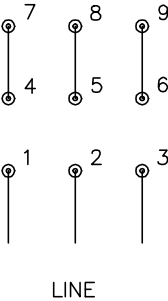
CD0180



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