

ABB BALDOR RELIANCE III

Customer information packet

VDRX28344T

30HP, 1770//1470RPM, 3PH, 60/50HZ, 286TC, XPF

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	286TC
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ 25.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 50 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
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	6
Current @ Voltage	38.000 A @ 380.0 V 38.000 A @ 460.0 V 76.000 A @ 190.0 V 76.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYG292
Eff. date	06-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	06-06-2019

Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.67 IN
Power Factor	80
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1401XPSLEV												
NO.							CC	010A				
S/N							TEMP CODE	T3C				
SPEC.	10-0000-0851						INV.TYPE	PWM				
CAT.NO.	VDRX28344T						C HP FR	60	C HP TO	90		
HP	30//25/30						CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60		
AMPS	76/38//76/38						MAG CUR	39.6/19.8				
RPM	1760//1475						MX RPM	2700				
HZ	60//50/6	PH	3	CL	F	NOM.EFF.	93.6					
SER.F.	1.00	DES	A	SL HZ	1.3	WK2	4.46					
FRAME	286TC	RATING	40C AMB-CONT									
	55C AMB @ 1.0 SF, 60C RISE											
	1.15SF ON SINEWAVE						NEMA MG-1 P5.5,IP55					

AC Induction Motor Performance Data

Record # 83882

Typical performance - not guaranteed values

Winding: 10WGY538-R047			Type: 1056M		Enclosure: XPFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		30//25		Full Load Torque		88.7 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		76/38		Breakdown Torque		330 LB-FT	
R.P.M.		1760//1475		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		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	
				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
Power Factor	41	63	73	80	82	85
Efficiency	87.6	92.3	93.5	93.7	93.4	92.9
Speed	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1
Line amperes	19.8	24.3	30.7	37.6	45.6	55.2

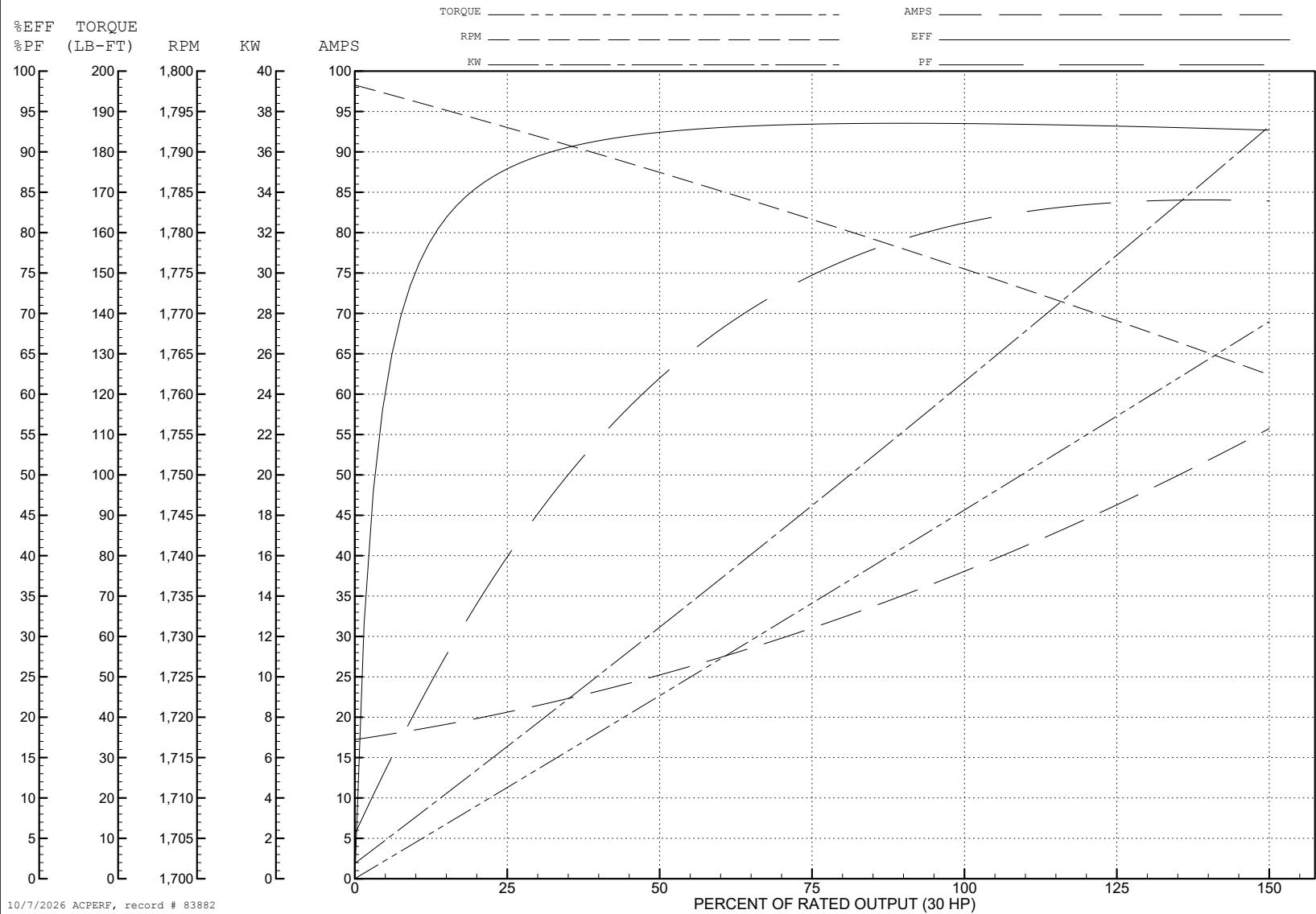
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1776.5 RPM 460 V 1056M

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



AC Induction Motor Performance Data

Record # 83883

Typical performance - not guaranteed values

Winding: 35WGM218-R026			Type: 3516M	Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)		.75	Full Load Torque		2.22 LB-FT
Volts		575	Start Configuration		direct on line
Full Load Amps		.9	Breakdown Torque		10.6 LB-FT
R.P.M.		1750	Pull-up Torque		6.34 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	7.57 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	7.89 A
Service Factor (S.F.)		1.25	No-load Current		0.621 A
NEMA Nom. Eff.	84	Power Factor	71	Line-line Res. @ 25°C	34.7 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		30°C
S.F. Amps		1.1	Temp. Rise @ S.F. Load		38°C
			Locked-rotor Power Factor		65.1
			Rotor inertia		0.0946 lb-ft²

Load Characteristics 575 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	48	62	71	78	83	78
Efficiency	68.4	80	83.4	84.4	84.3	82.1	84.3
Speed	1790	1778	1766	1753	1739	1722	1739
Line amperes	0.647	0.711	0.808	0.924	1.07	1.24	1.07

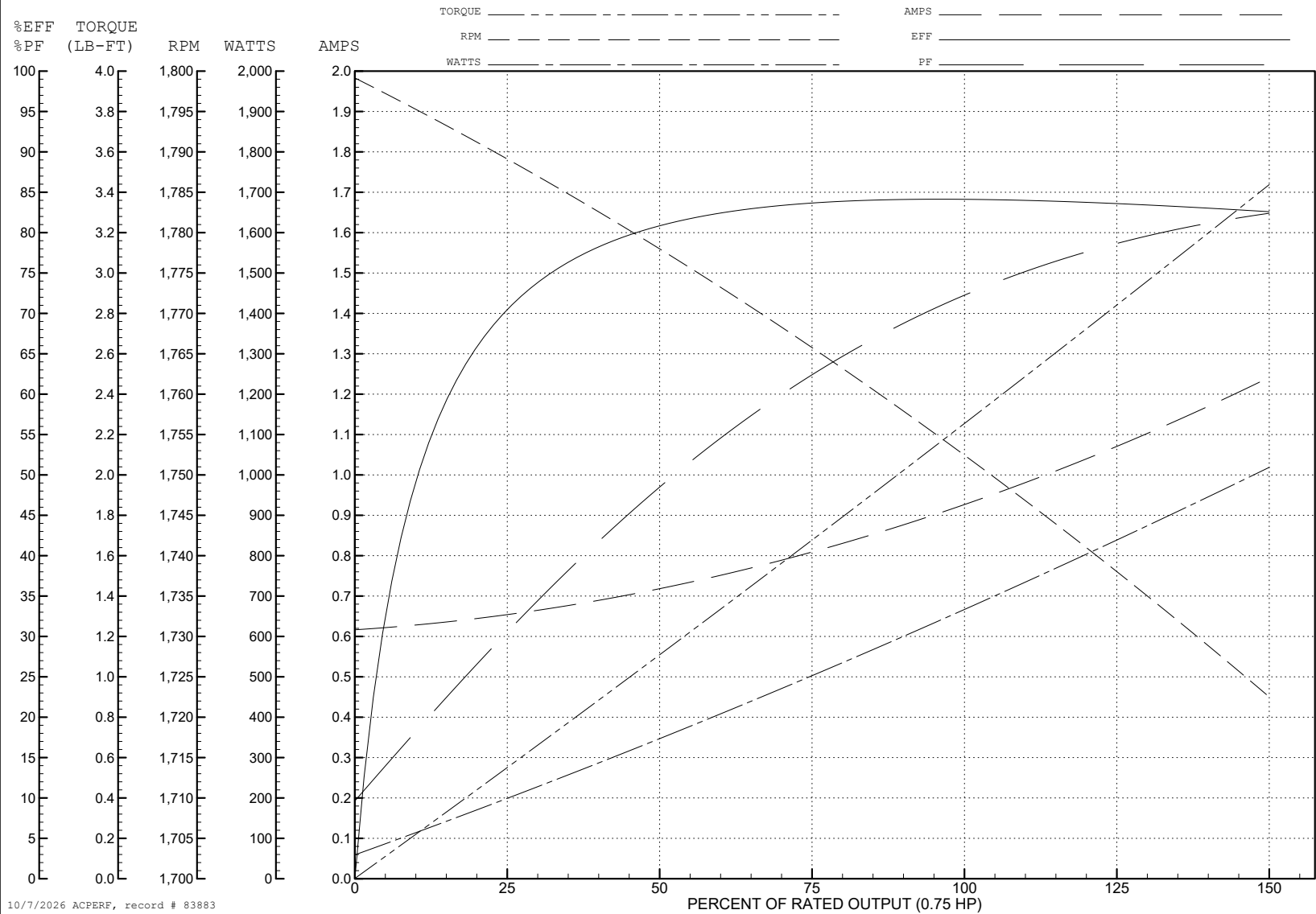
ABB Motors and Mechanical Inc.

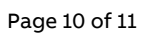
WINDING # 35WGM218

0.75 HP 3 PH 60 HZ 1750 RPM 575 V 3516M

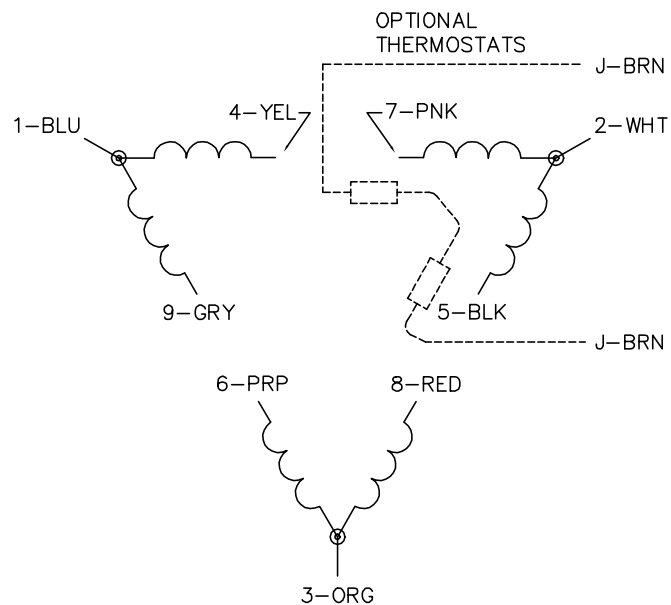
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=10.6 PU=6.34 LR=7.57 LRA=7.89

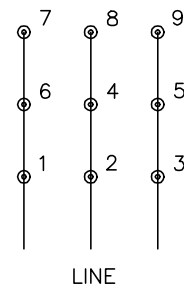




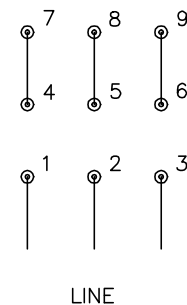
CD0180



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