

BALDOR • RELIANCE

Customer information packet

DRX32544T

50HP, 1775//1475RPM, 3PH, 60HZ, 326T, XP, F1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XP
Frame	326T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ 40.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 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
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	114.000 A @ 190.0 V 118.000 A @ 230.0 V 57.000 A @ 380.0 V 59.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %

Part detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY585
Layout	12LYG128
Eff. date	11-05-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	03-07-2019

Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	57.0 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	1276M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	32.00 IN
Power Factor	84
Product Family	Chemical Process Features
Pulley Face Code	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 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

AC Induction Motor Performance Data

Record # 60172

Typical performance - not guaranteed values

Winding: 12WGY585-R008		Type: 1276M	Enclosure: XPFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50		Full Load Torque	148 LB-FT
Volts	230/460		Start Configuration	direct on line
Full Load Amps	118/59		Breakdown Torque	561 LB-FT
R.P.M.	1775		Pull-up Torque	236 LB-FT
Hz	60 Phase	3	Locked-rotor Torque	279 LB-FT
NEMA Design Code	A KVA Code	J	Starting Current	475 A
Service Factor (S.F.)	1		No-load Current	25 A
NEMA Nom. Eff.	94.5 Power Factor	84	Line-line Res. @ 25°C	0.096885 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	56°C
			Locked-rotor Power Factor	26.4
			Rotor inertia	10.1 LB-FT ²

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	46	68	78	84	85	87
Efficiency	90	93.7	94.6	94.7	94.4	93.9
Speed	1794	1789.1	1784.4	1779.2	1773.7	1767.4
Line amperes	28.6	36.9	47.3	59.1	72.4	86.3

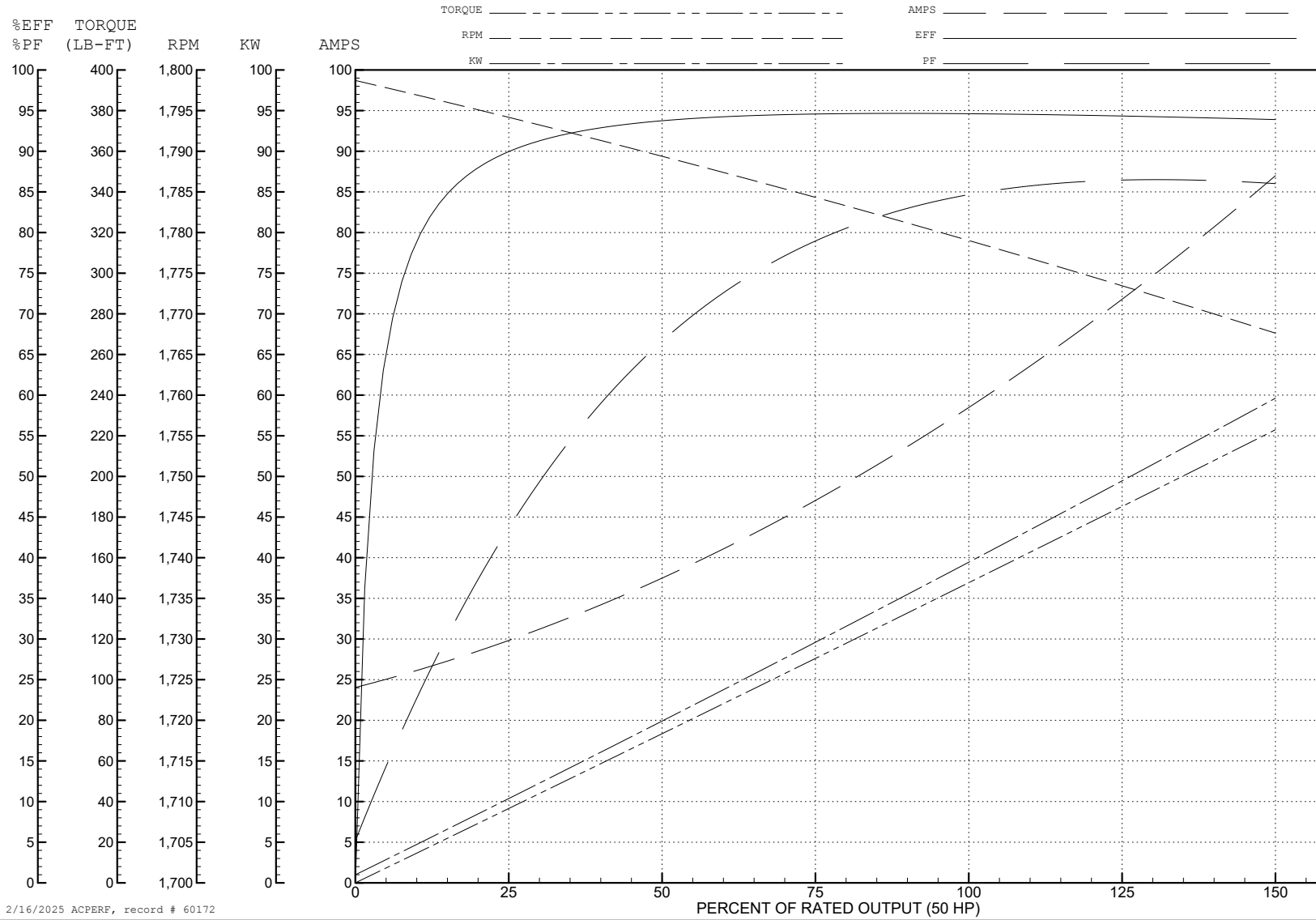
ABB Motors and Mechanical Inc.

WINDING # 12WGY585

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1775 RPM 460 V 1276M

TORQUES (LB-FT): PO=561 PU=236 LR=279 LRA=475



2/16/2025 ACPERF, record # 60172

AC Induction Motor Performance Data

Record # 74482

Typical performance - not guaranteed values

Winding: 12WGY585-R011		Type: 1276M		Enclosure: XPFC		
Nameplate Data			380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)	50//40		Full Load Torque	142 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	118/59//114/57		Breakdown Torque	544 LB-FT		
R.P.M.	1775//1475		Pull-up Torque	248 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	293 LB-FT	
NEMA Design Code	A		KVA Code	J	Starting Current	465 A
Service Factor (S.F.)	1			No-load Current	24.51 A	
NEMA Nom. Eff.	94.5	Power Factor	84	Line-line Res. @ 25°C	0.0936 Ω	
Rating - Duty	40C		AMB-CONT	Temp. Rise @ Rated Load	52°C	
S.F. Amps				Temp. Rise @ S.F. Load	63°C	
				Locked-rotor Power Factor	29.3	
				Rotor inertia	10.1 LB-FT ²	

Load Characteristics 380 V, 50 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	67	78	84	86	87
Efficiency	90.3	93.7	94.6	94.3	94.2	93.2
Speed	1494	1490	1485	1480	1475	1469
Line amperes	27.9	35.86	45.89	57.36	70.22	83.76

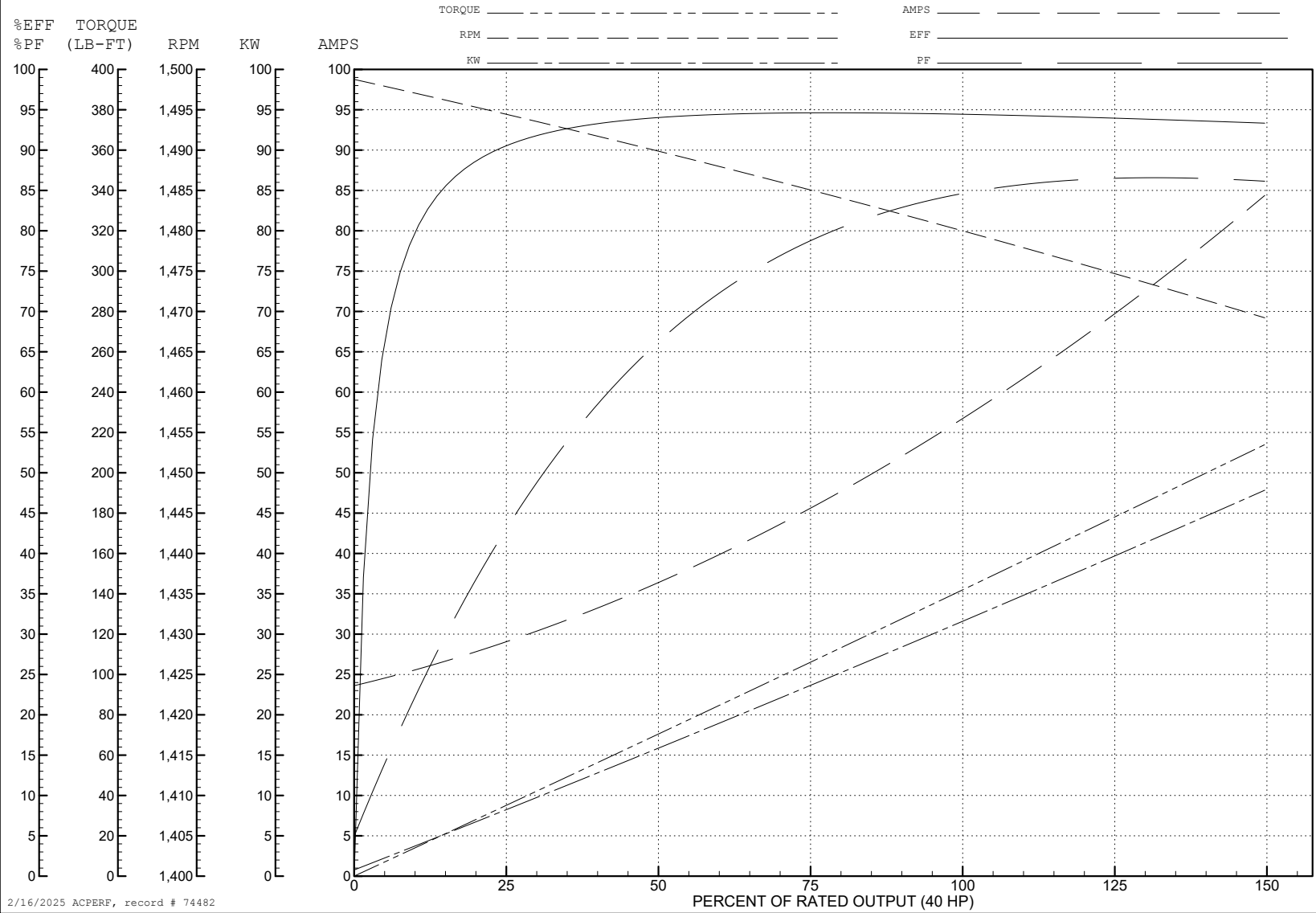
ABB Motors and Mechanical Inc.

WINDING # 12WGY585

Typical performance - not guaranteed values.

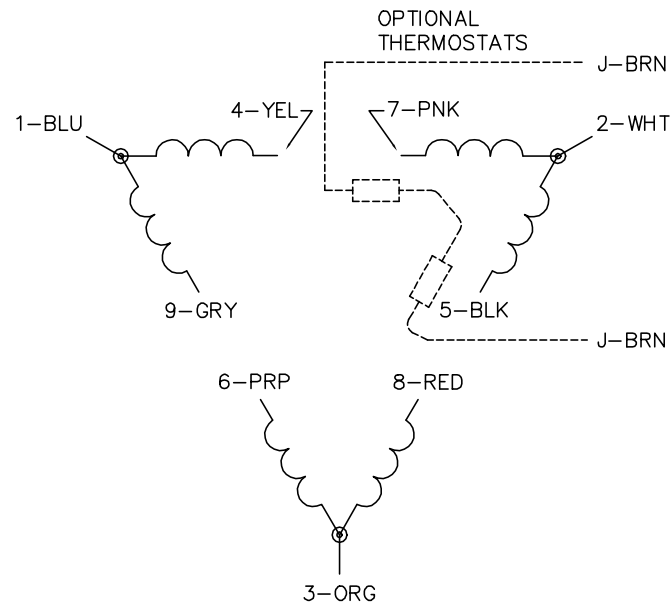
40 HP 3 PH 50 HZ 1480 RPM 380 V 1276M

TORQUES (LB-FT): PO=544 PU=248 LR=293 LRA=465

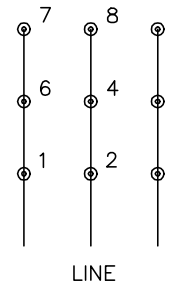


2/16/2025 ACPERF, record # 74482

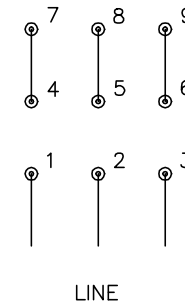
CD0180



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

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