

**BALDOR • RELIANCE**

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# Customer information packet

## VECP4100T

15HP, 1175RPM, 3PH, 60HZ, 284TC, 1046M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

Enclosure	TEFC
Frame	284TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
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	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary 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	42.000 A @ 230.0 V 42.000 A @ 208.0 V 21.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated

## Part detail

Revision	F
Type	AC
Mech. spec.	10H462
Base	
Status	PRD/A
Elec. spec.	10WGY561
Layout	10LYH462
Eff. date	07-19-2023
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	12-13-2017

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	21.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
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	30.70 IN
Power Factor	73
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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	1175 rpm
Speed Code	Single Speed

<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3241**

<b>CAT.NO.</b>	VECP4100T	<b>P/N</b>		<b>ENCLOSURE</b>	TEFC
<b>SPEC.</b>	10H462Y561G1	<b>CC</b>	010A	<b>FRAME</b>	284TC
<b>HP</b>	15	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	1175	<b>RPM MAX</b>	1800	<b>PH</b>	3
<b>VOLT</b>	230/460	<b>MOTOR WEIGHT</b>	475	<b>DES</b>	A
<b>AMP</b>	42/21	<b>SER.F.</b>	1.15	<b>PF</b>	73
<b>RATING</b>	40C AMB-CONT	<b>NEMA-NOM-EFF</b>	91.7	<b>ODE BRG</b>	6311
				<b>DE BRG</b>	6311
				<b>GREASE</b>	POLYREX EM
				<b>INV.TYPE</b>	PWM
<b>TEMP CODE</b>	T3C	<b>INVERTER-TEMP-CODE</b>	180		
<b>TEMP =</b>	160	<b>C HP FR</b>	60	<b>C HP TO</b>	90
<b>CT HZ FROM</b>	1.3	<b>CT HZ TO</b>	60		
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>		<b>HTR-WATTS</b>	
				<b>MAX. SPACE HEATER TEMP.</b>	
				<b>VT HZ FROM</b>	0
				<b>VT HZ TO</b>	60

**AC Induction Motor Performance Data**

Record # 29743

Typical performance - not guaranteed values

<b>Winding: 10WGY561-R001</b>		<b>Type: 1046M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	15	<b>Full Load Torque</b>	66.68 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	42/21	<b>Breakdown Torque</b>	213 LB-FT		
<b>R.P.M.</b>	1175	<b>Pull-up Torque</b>	93.1 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	114 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	H	<b>Starting Current</b>	144 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	12.4 A	
<b>NEMA Nom. Eff.</b>	91.7 <b>Power Factor</b>	73	<b>Line-line Res. @ 25°C</b>	0.502 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	43°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	51°C	
			<b>Locked-rotor Power Factor</b>	32.9	
			<b>Rotor inertia</b>	5.63 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 15 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	32	52	65	72	76	78	75
<b>Efficiency</b>	83	89.4	91.3	91.7	91.4	90.8	91.7
<b>Speed</b>	1196	1193	1189	1185	1181	1177	1181
<b>Line amperes</b>	13.2	15.1	17.9	21.3	25.3	29.6	23.4

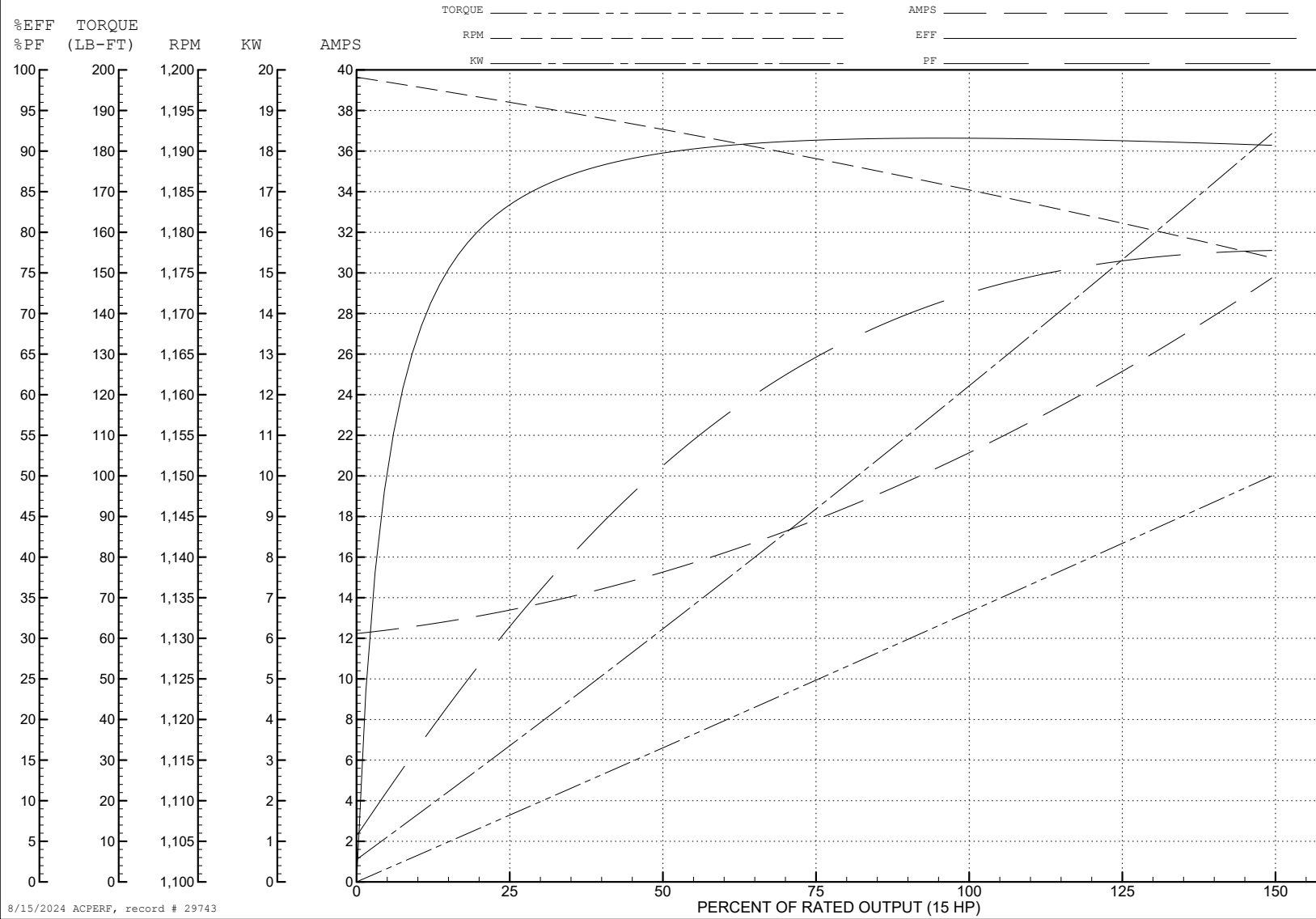
ABB Motors and Mechanical Inc.

WINDING # 10WGY561

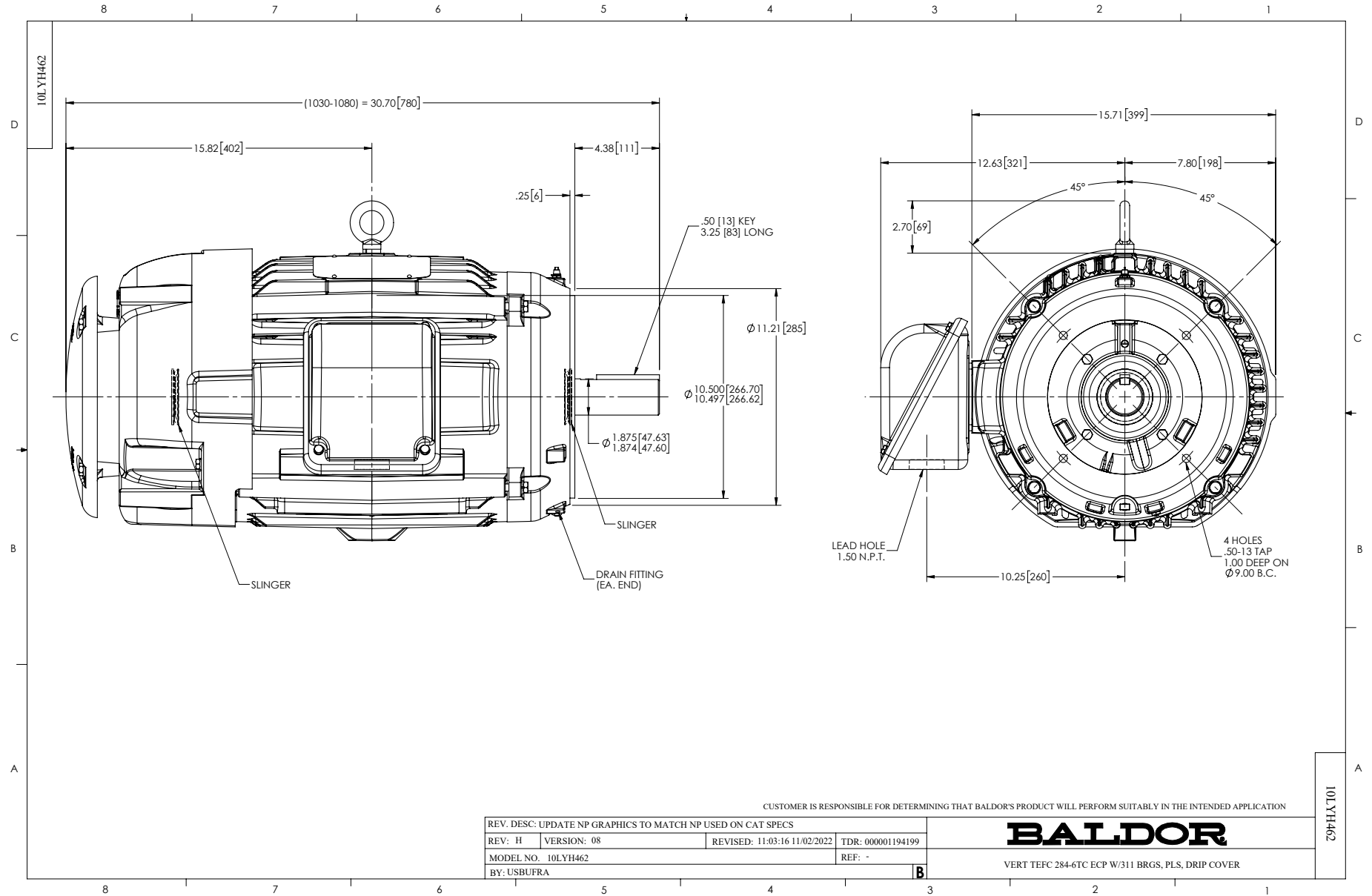
Typical performance - not guaranteed values.

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

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



8/15/2024 ACPERF, record # 29743





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
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**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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