

**BALDOR • RELIANCE**

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# Customer information packet

## CTM3770T

7.5 AIR OVERHP, 1760RPM, 3PH, 60HZ, 213T, 073

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEAO
Frame	213T
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
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
Current @ Voltage	20.900 A @ 208.0 V 20.000 A @ 230.0 V 10.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	B
Type	AC
Mech. spec.	07N391
Base	
Status	PRD/A
Elec. spec.	07WGT575
Layout	07LYN391
Eff. date	06-06-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	03-21-2023

High Voltage Full Load Amps	10.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0730M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.54 IN
Power Factor	79
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
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
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

**Nameplate**

<b>NP1258</b>									
<b>CAT.NO.</b>	CTM3770T								
<b>SPEC.</b>	07N391T575H1								
<b>HP</b>	7.5 AIR OVER								
<b>VOLTS</b>	208-230/460								
<b>AMP</b>	20.9-20/10								
<b>RPM</b>	1760								
<b>FRAME</b>	213T	<b>HZ</b>	60	<b>PH</b>	3				
<b>SER.F.</b>	1.15	<b>CODE</b>	H	<b>DES</b>	A	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	89.5	<b>PF</b>	79						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6307	<b>ODE</b>	6206						
<b>ENCL</b>	TEAO	<b>SN</b>							
	1700 FPM 170 CFM								

**AC Induction Motor Performance Data**

Record # 99021

Typical performance - not guaranteed values

Winding: 07WGT575-R001		Type: 0730M	Enclosure: TEAO	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	7.5 AIR OVER		Full Load Torque	22.24 LB-FT
Volts	208-230/460		Start Configuration	direct on line
Full Load Amps	20.9-20/10		Breakdown Torque	65.3 LB-FT
R.P.M.	1760		Pull-up Torque	29 LB-FT
Hz	60 Phase	3	Locked-rotor Torque	43.2 LB-FT
NEMA Design Code	A KVA Code	H	Starting Current	66.1 A
Service Factor (S.F.)	1.15		No-load Current	5.15 A
NEMA Nom. Eff.	89.5 Power Factor	79	Line-line Res. @ 25°C	1.71 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	65°C
S.F. Amps			Temp. Rise @ S.F. Load	79°C
			Locked-rotor Power Factor	40
			Rotor inertia	0.738 lb-ft <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	59	71	77	80	82	79
Efficiency	80.7	87.7	89.5	90.1	89	87.1	89.4
Speed	1791	1783	1773	1763	1752	1741	1756
Line amperes	5.52	6.62	8.23	10.09	12.23	14.56	11.4

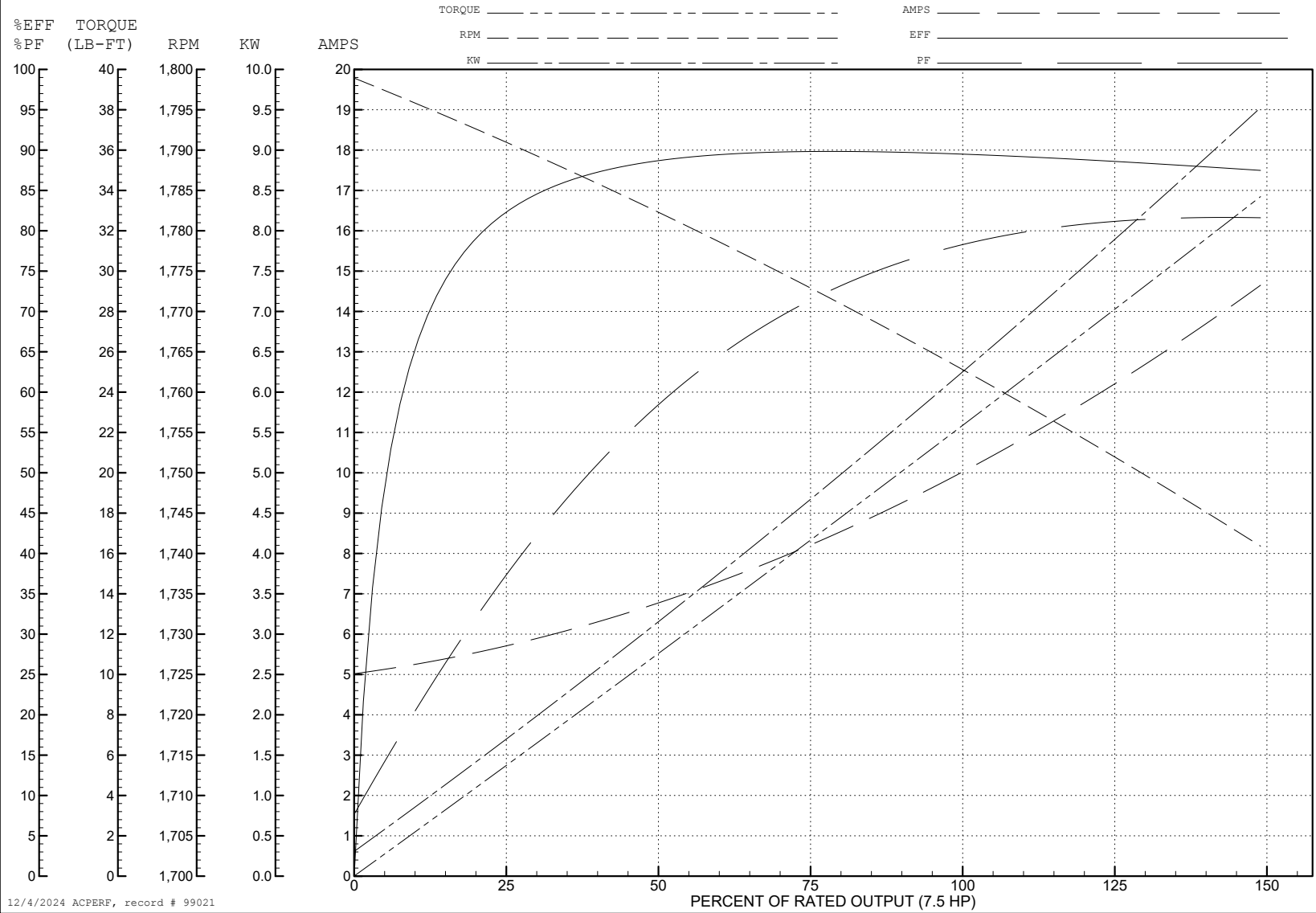
ABB Motors and Mechanical Inc.

WINDING # 07WGT575

7.5 HP 3 PH 60 HZ 1760 RPM 460 V 0730M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=65.3 PU=29 LR=43.2 LRA=66.1



12/4/2024 ACPERF, record # 99021

**AC Induction Motor Performance Data**

Record # 99022

Typical performance - not guaranteed values

<b>Winding: 07WGT575-R001</b>		<b>Type: 0730M</b>		<b>Enclosure: TEAO</b>	
<b>Nameplate Data</b>			<b>208 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5 AIR OVER		<b>Full Load Torque</b>	22.3 LB-FT	
<b>Volts</b>	208-230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	20.9-20/10		<b>Breakdown Torque</b>	52.6 LB-FT	
<b>R.P.M.</b>	1760		<b>Pull-up Torque</b>	26.5 LB-FT	
<b>Hz</b>	60	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	38 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	H	<b>Starting Current</b>	117 A
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	8.07 A	
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	79	<b>Line-line Res. @ 25°C</b>	0.427 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	66°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	82°C	
			<b>Locked-rotor Power Factor</b>	40	
			<b>Rotor inertia</b>	0.738 lb-ft <sup>2</sup>	

**Load Characteristics 208 V, 60 Hz, 7.5 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>	48	70	79	82	84	84	83
<b>Efficiency</b>	83.6	89	90	90	88.4	85.9	89
<b>Speed</b>	1790	1780	1769	1757	1743	1728	1749
<b>Line amperes</b>	9.27	12.28	16.31	20.9	26.13	31.92	24

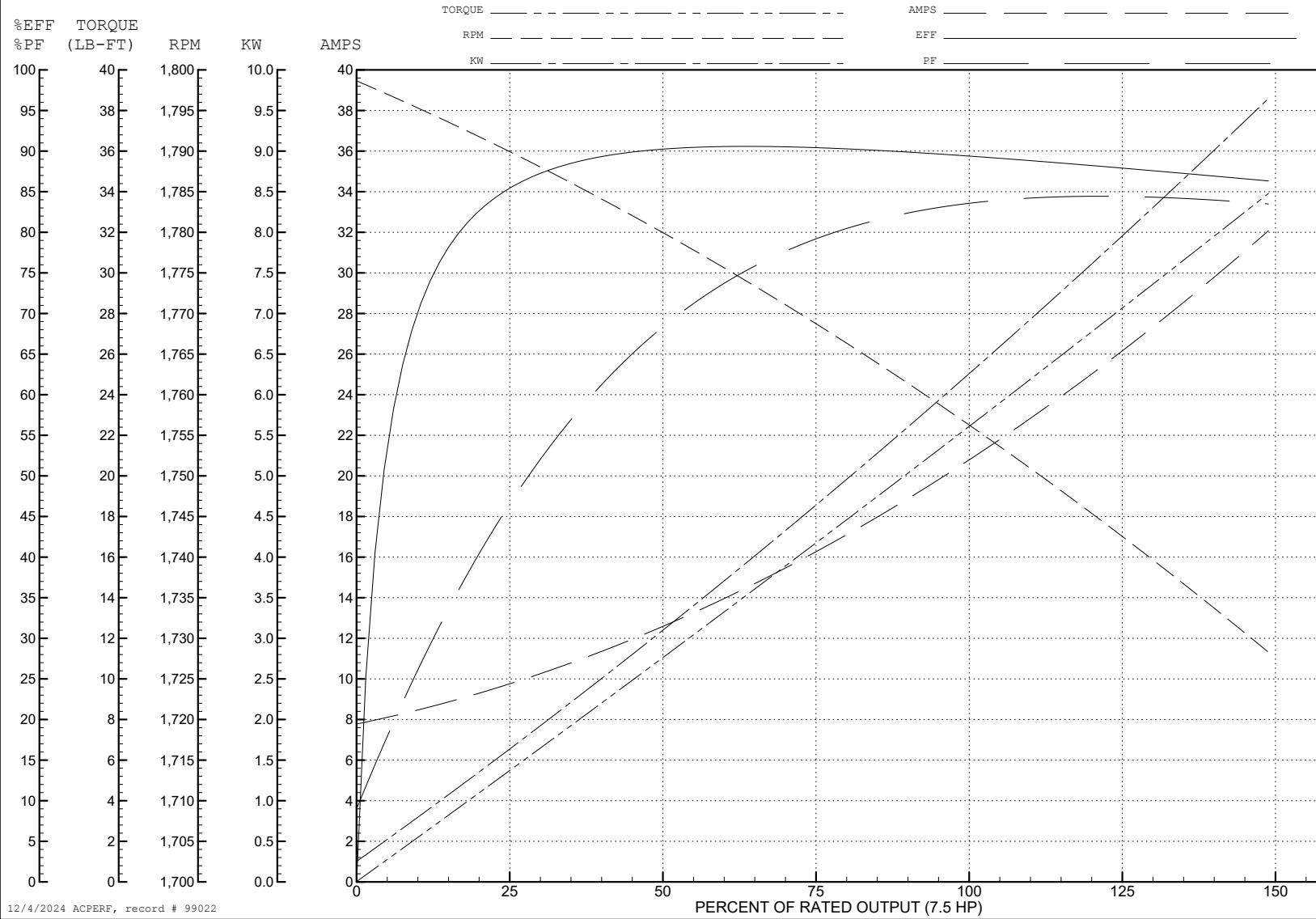
ABB Motors and Mechanical Inc.

WINDING # 07WGT575

Typical performance - not guaranteed values.

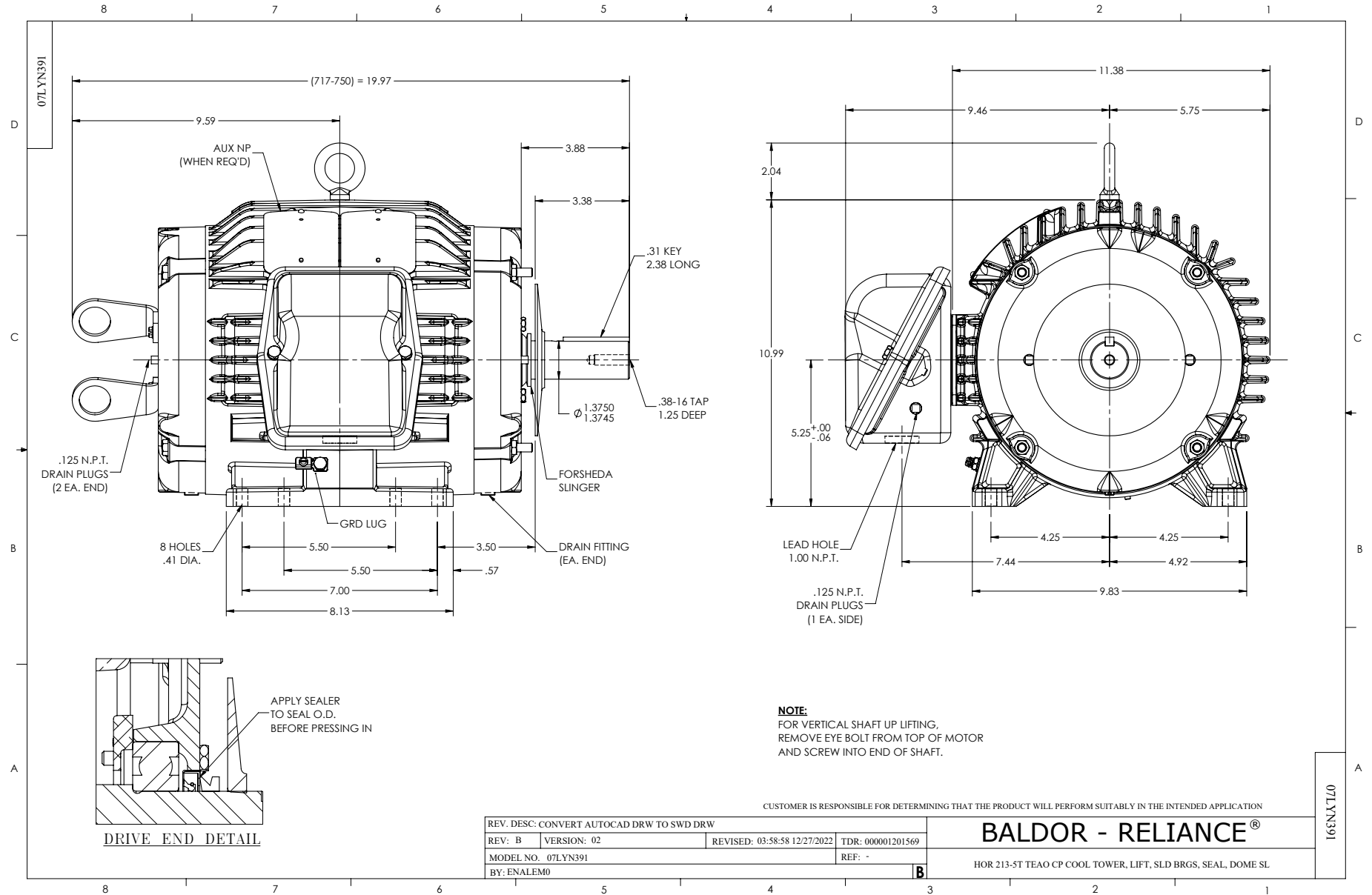
7.5 HP 3 PH 60 HZ 1760 RPM 208 V 0730M

TORQUES (LB-FT): PO=52.6 PU=26.5 LR=38 LRA=117



12/4/2024 ACPERF, record # 99022

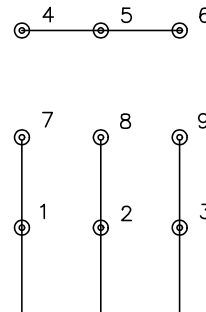




CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS