

ABB BALDOR RELIANCE III

Customer information packet

ECP3770T-4

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 0738M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1
Current @ Voltage	9.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AF
Type	AC
Mech. spec.	07K374
Base	
Status	PRD/A
Elec. spec.	07WGX578
Layout	07LYK374
Eff. date	10-01-2025
CD Diagram	CD0006
Poles	04
Leads	3#14 Y
Proprietary	False
Created date	08-19-2006

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.50 IN
Power Factor	81
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 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

NP3257							
CAT.NO.	ECP3770T-4						
SPEC.	07K374X578G1						
HP	7.5 TE						
VOLTS	460						
AMP	9.5						
RPM	1770						
FRAME	213T	HZ	60	PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	F
RATING	40C AMB-CONT						
SN							
DE	6307	ODE	6307				
NEMA-NOM-EFF	91.7	PF	81				
G.MIN.EFF	90.2	CC	010A				
T. CODE	T3C	T=	160				

NP3260			
SPEC.	07K374X578G1		
D.E. BRG.	35BC03XP30X		
O.D.E. BRG.	35BC03XP30X		
GREASE	POLYREX EM		
RPM MAX	2700	MAX. KVAR	1.4
BLANK			
INV.TYPE	PWM		
T=	160		
C HP FR	60	C HP TO	90
CT HZ FROM	1	CT HZ TO	60
VT HZ FROM	0-	VT HZ TO	60
HTR-VOLTS		HTR-AMPS	
HTR-WATTS		MAX. SPACE HEATER TEMP.	

AC Induction Motor Performance Data

Record # 47030

Typical performance - not guaranteed values

Winding: 07WGX578-R066				Type: 0738M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		7.5		Full Load Torque		22.2 LB-FT	
Volts		460		Start Configuration		direct on line	
Full Load Amps		9.5		Breakdown Torque		70.9 LB-FT	
R.P.M.		1770		Pull-up Torque		32.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		43 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		70.8 A
Service Factor (S.F.)		1.15		No-load Current		4.3 A	
NEMA Nom. Eff.		91.7	Power Factor	81	Line-line Res. @ 25°C		1.41 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C	
S.F. Amps				Temp. Rise @ S.F. Load		50°C	
				Locked-rotor Power Factor		37.2	
				Rotor inertia		0.934 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	80	83	84	82
Efficiency	87.5	91.6	92.5	92	91.1	90.1	91.5
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9	10.7

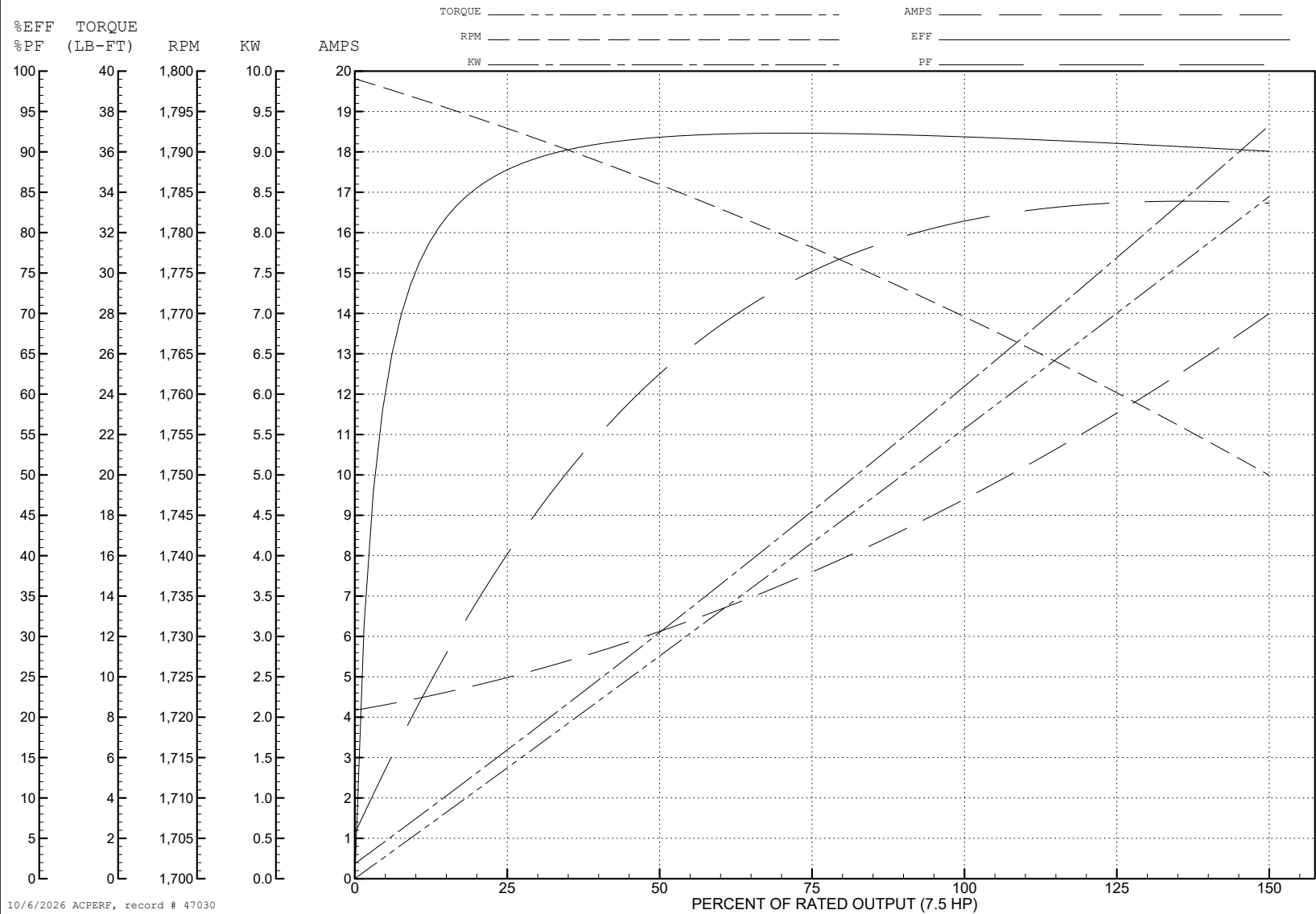
ABB Motors and Mechanical Inc.

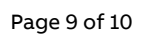
WINDING # 07WGX578

Typical performance - not guaranteed values.

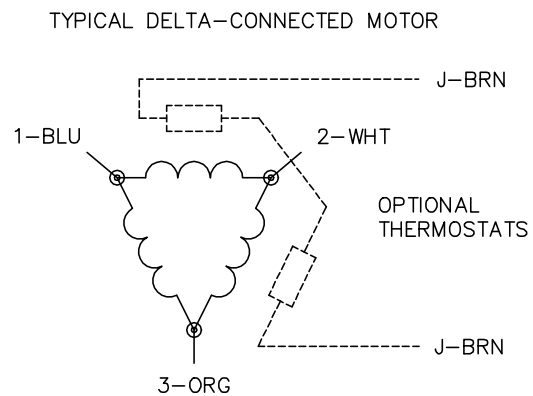
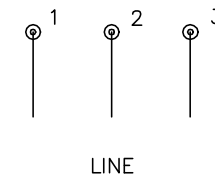
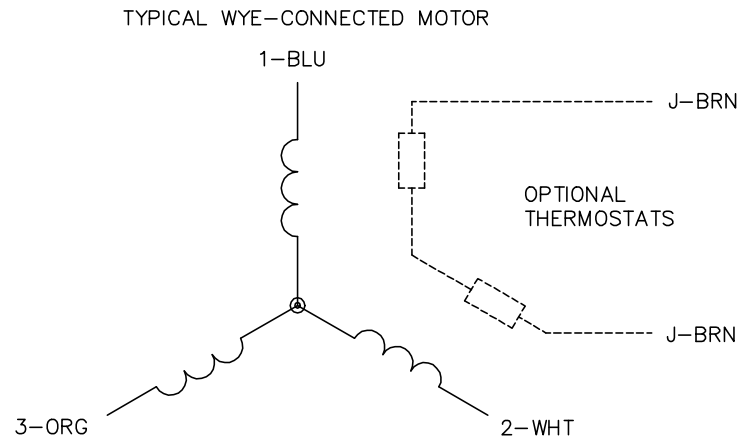
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

TORQUES (LB-FT): PO=70.9 PU=32.7 LR=43 LRA=70.8





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: -



BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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