

ABB BALDOR RELIANCE III

Customer information packet

VECP3665T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 0642M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	184TC
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	5.000 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	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
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	1.7
Current @ Voltage	14.000 A @ 208.0 V 6.500 A @ 460.0 V 13.000 A @ 230.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %

Part Detail

Revision	R
Type	AC
Mech. spec.	06H480
Base	
Status	PRD/A
Elec. spec.	06WGX182
Layout	06LYH480
Eff. date	10-01-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	04-05-2012

Electrically Isolated Bearing	Not Electrically Isolated
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	6.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.98 IN
Power Factor	79
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1750 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.	VECP3665T								
SPEC.	06H480X182G1								
HP	5 TE								
VOLTS	208-230/460								
AMP	14-13/6.5								
RPM	1750								
FRAME	184TC	HZ		60	PH		3		
SER.F.	1.15	CODE	J	DES	B	CL	F		
RATING	40C AMB-CONT								
SN									
DE	6206	ODE		6206					
NEMA-NOM-EFF	89.5	PF		79					
G.MIN.EFF	89.5	CC	010A						
T. CODE	T3C	T=	160						

NP3260			
SPEC.	06H480X182G1		
D.E. BRG.	30BC02XP30X		
O.D.E. BRG.	30BC02XP30X		
GREASE	POLYREX EM		
RPM MAX	2700	MAX. KVAR	1.7
BLANK			
INV.TYPE	PWM		
T=	160		
C HP FR	60	C HP TO	90
CT HZ FROM	1.7	CT HZ TO	60
VT HZ FROM	0-	VT HZ TO	60
HTR-VOLTS		HTR-AMPS	
HTR-WATTS		MAX. SPACE HEATER TEMP.	

Parts List

Part number	Description	Quantity
SA242299	SA 06H480X182G1	1.000 ea
RA229210	RA 06H480X182G1	1.000 ea
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
06CB1000A02G	CONDUIT BOX, MACH GRAY	1.000 ea
RM1016	LEAD SEPARATOR GASKET - 305/306 C.P.MOTO	1.000 ea
51XF2520A16	SCREW,HEX SER SLT HD,ZN 1/4-20X1.00LG TD	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	2.000 ea
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
36EP1100B73G	FREP 6206,GRSR,RLF,.25-20 FH HOLES @.50	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
36EP1300A48G	SPL PU 206 BRG. 182-4TC W/GREASER & RELI	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
10XN2520A24	1/4-20X 1 1/2 HEX HD X	4.000 ea
HA3101A34	THRUBOLT- 1/4-20 X 10.375	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
06FH5000A05GSP	FAN COVER W/37FH4500 DRIP ASSY (GRAY EPO	1.000 ea
10XN2520A24	1/4-20X 1 1/2 HEX HD X	3.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
06CB1502G	LIPPED CONDUIT BOX LID CAST, GRAY EPOXY	1.000 ea
06GS1003	GASKET, KOBX LID, 1/8" THICK BLACK NEOPR	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 ea

HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
HA1005A22	SLINGER, OD 2.00, ID 1.14, 206 BRG, GM	1.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.380 X .24 VITON	1.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1002N	LABEL, MARINE DUTY (ON ROLLS)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.028 ga
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
LC0005	CONN.DIA., TY M, 9-LD, DUAL VOLT, REVERSING	1.000 ea
NP3257	SS CP SUPER-E DIV-2 UL CSA-C US EEV PREM	1.000 ea
NP3260	SS CP SUPER-E AUX DATA INFORMATION	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 47003

Typical performance - not guaranteed values

Winding: 06WGX182-R063			Type: 0642M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		15 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		14-13/6.5	Breakdown Torque		53.9 LB-FT		
R.P.M.		1750	Pull-up Torque		22.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		31.8 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		46.6 A
Service Factor (S.F.)		1.15	No-load Current		3.02 A		
NEMA Nom. Eff.		89.5	Power Factor	79	Line-line Res. @ 25°C		2.63 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		53°C
S.F. Amps					Temp. Rise @ S.F. Load		66°C
					Locked-rotor Power Factor		40.5
					Rotor inertia		0.391 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	75	81	84	85	81
Efficiency	85.1	89.7	90.3	89.8	88.4	86.8	89.2
Speed	1789	1777	1765	1752	1737	1721	1743
Line amperes	3.35	4.14	5.21	6.45	7.91	9.47	7.48

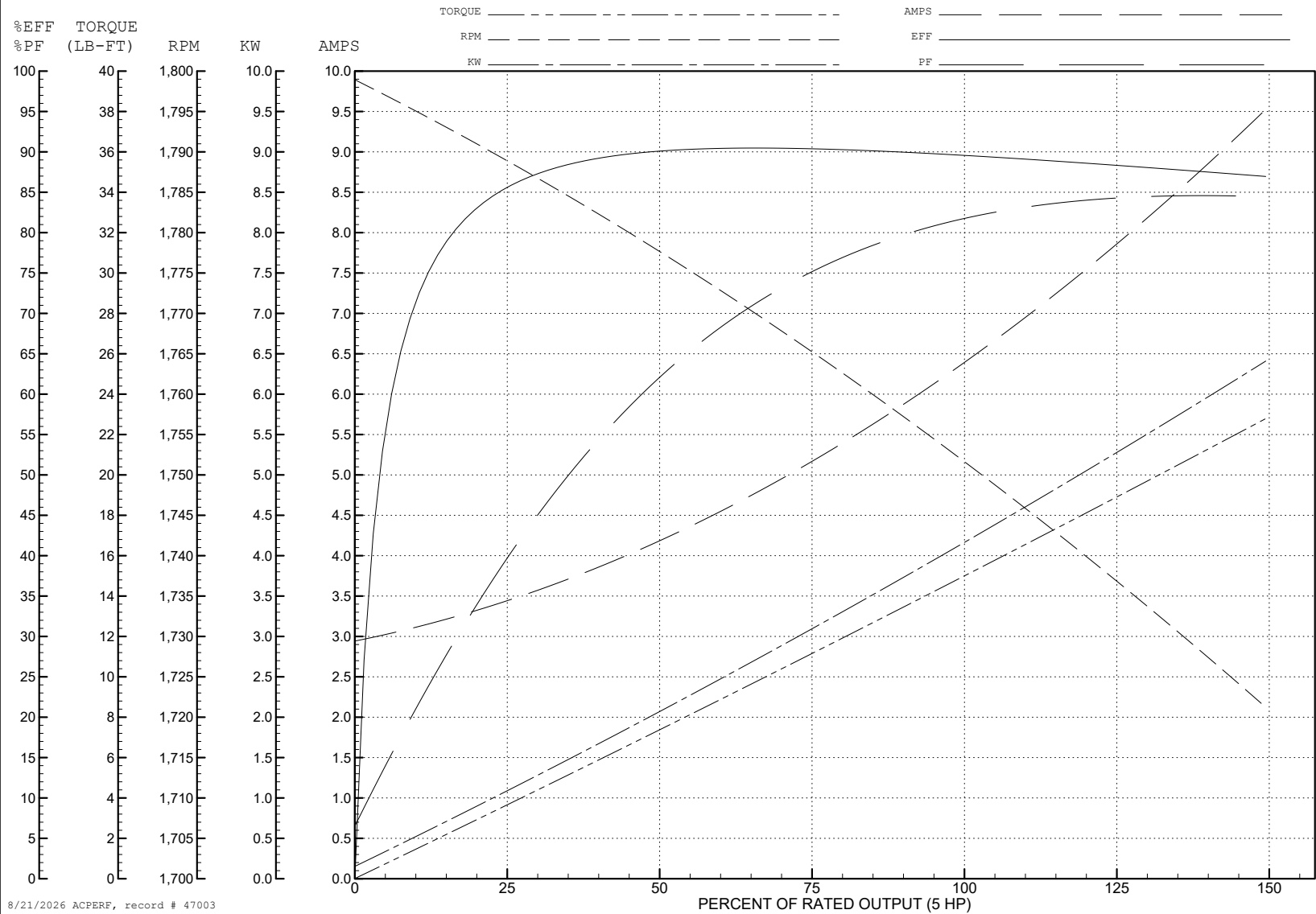
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WINDING # 06WGX182

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 0642M

TORQUES (LB-FT) : PO=53.9 PU=22.4 LR=31.8 LRA=46.6



AC Induction Motor Performance Data

Record # 49253

Typical performance - not guaranteed values

Winding: 06WGX182-R063			Type: 0642M		Enclosure: TEFC		
Nameplate Data			230 V, 60 Hz: Low Voltage Connection				
Rated Output (HP)		5	Full Load Torque		15 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		14-13/6.5	Breakdown Torque		53.9 LB-FT		
R.P.M.		1750	Pull-up Torque		22.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		31.8 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		93.2 A
Service Factor (S.F.)		1.15		No-load Current		6.04 A	
NEMA Nom. Eff.		89.5	Power Factor	79	Line-line Res. @ 25°C		0.658 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		53°C	
S.F. Amps				Temp. Rise @ S.F. Load		65°C	
				Locked-rotor Power Factor		40.5	
				Rotor inertia		0.391 LB-FT2	

Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	75	81	84	85	81
Efficiency	85.2	89.8	90.4	89.8	88.4	86.9	88.8
Speed	1789	1777	1765	1752	1737	1721	1739
Line amperes	6.7	8.28	10.4	12.9	15.8	18.9	15

ABB Motors and Mechanical Inc.

WINDING # 06WGX182

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 230 V 0642M

TORQUES (LB-FT) : PO=53.9 PU=22.4 LR=31.8 LRA=93.2

