

PRODUCT INFORMATION PACKET



Model No: 170142.60

Catalog No: 170142.60

WATTSaver® General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V,
1800 & 1500 RPM, 213T Frame, DP



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Nameplate Specifications

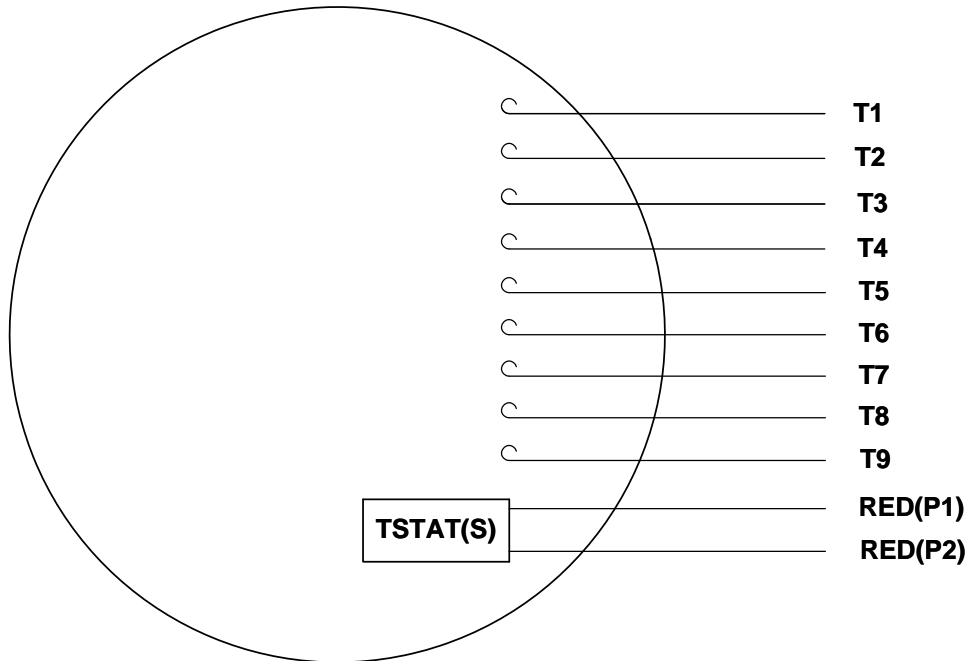
Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	208-230/460 & 190/380 V
Speed	1760 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	213T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	20.6-19.8/16.8 & 9.9/8.4 A	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	J
Drive End Bearing Size	6308	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

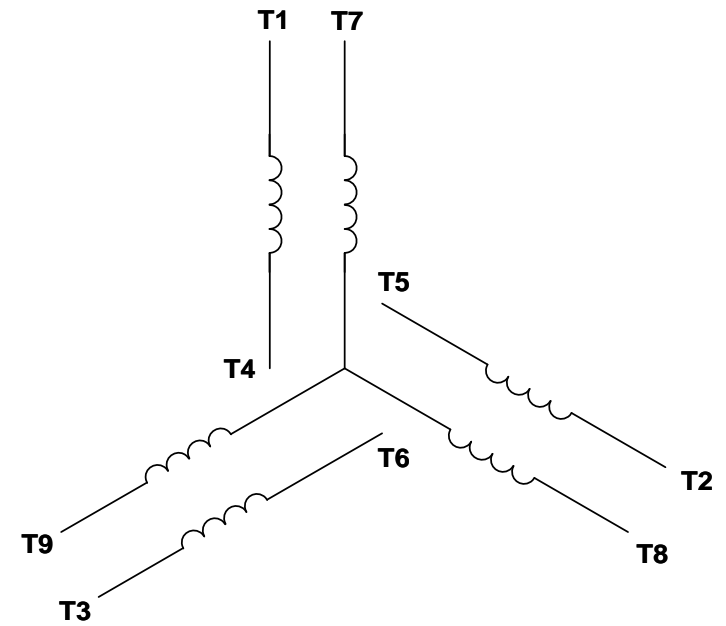
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.317 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	16.38 in
Shaft Diameter	1.375 in	Shaft Extension	3.38 in
Assembly/Box Mounting	F1 ONLY		
Connection Drawing	005010.20	Outline Drawing	16954960

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.

Uncontrolled Copy



LINE LEADS



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

DRAWING REVISION G	REVISION BY MVG	DATE 04/05/2017
ECO ECO-0121253	APPROVED BY SM	DATE 04/05/2017
ECO DESCRIPTION ADDED P1 & P2 FOR TSTAT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 125/3.2 INCH/mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY DBT 12/16/97	DATE
APPROVED BY KH 12/17/97	DATE
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.	
DESCRIPTION CONN DIAGRAM-EXTERNAL 3 PHASE WITH PROTECTOR	
MATERIAL DECAL - 004014 (TSTAT) - 080582	PROCESS/FINISH STOCK
SIZE A	DRAWING NUMBER 00501020
SHEET 1 OF 1	



CERTIFICATION DATA SHEET

**1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810**

CATALOG #: 170142.60

CONN. DIAGRAM: 005010.20

OUTLINE: 16954960

MOUNTING: F1 ONLY

WINDING #: T10704007 DR 3 A

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.60&3.70	1800	1760&1475	213T	DP	J	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	20.6-19.8/16.8&9.9/8.4	LINE OR INVERTER	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	91	3/4 LOAD EFF:	92.7	1/2 LOAD EFF:	92.3	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	78	3/4 LOAD PF:	71.5	1/2 LOAD PF:	58.8	89.5	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.5 LB-FT	145 / 72.5	45 LB-FT 201 %	78.3 LB-FT 350 %	28.7

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
47 dBA	57 dBA	0.829 LB-FT^2	0.8 LB-FT^2	- SEC.	-	- LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6308	6208						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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INVERTER TORQUE: CONSTANT 4:1

INV. HP SPEED RANGE: NONE

ENCODER: NONE

NONE NONE

NONE NONE PPR

BRAKE: NONE NONE

NONE P/N NONE

NONE NONE

NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/22/2018

170142.60



Data @ 460 V

Motor Load Data

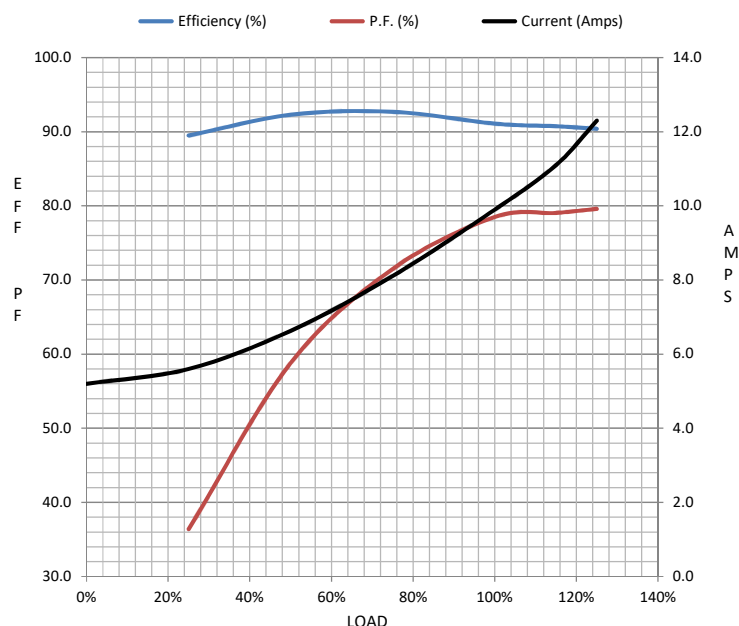
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.2	5.6	6.6	8.1	9.9	11.1	12.3	72.5	
Torque (ft-lb)	0.00	5.7	11.3	17.0	22.5	25.4	28.2	45.0	
RPM	1800	1793	1785	1778	1765	1763	1760	0	
Efficiency (%)		89.5	92.3	92.7	91.1	90.8	90.4		
P.F. (%)	5.1	36.4	58.8	71.5	78.5	79.1	79.6	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1656	1765	1800
Current (Amps)	72.5	66.7	43.5	9.9	5.2
Torque (ft-lb)	45.0	37.1	78.3	22.5	0.00

Information Block

HP	7.5			
Sync. RPM	1800			
Frame	213			
Enclosure	DP			
Construction	TDC			
Voltage	208-230/460#190/380	V		
Frequency	60	Hz		
Design	A			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	29	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	0.83	Lb-Ft²		
Ref Wdg	T10704007	DR		
Sound Pressure @ 1M	47	dBa		
VFD Rating	CONSTANT 4:1			
Outline Dwg	16954960			
Conn. Diag	005010.01			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed - Torque Curve

