

BALDOR® • RELIANCE

Product Information Packet

M28902-58

90KW,2965RPM,3PH,50HZ,D280S,1856M,TEFC,B

Part Detail							
Revision:	E	Status:	INA/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	1856M	Elec. Spec:	18WGY196	CD Diagram:	CD0382
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	18E885	Layout:	18LYE885
Frame:	D280S	Mounting:	B3	Poles:	02	Created Date:	07-28-2007
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	07-12-2011
Leads:	6#2					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP1954L							
CAT NO							
SPEC.	18E885Y196G1						
SER.NO							
FRAME	D280S	MTG	B3	I.P.	55		
ENCL	TEFC	WEIGHT		CL	F		
DE BRG	6314	ODE	6313				
RATING	40C AMB-CONT						
BLANK							
R/MIN	2965	RPM	3570				
KW	90	VOLTS DELTA	400	HP	125	460	
DESIGN	N	A	155-147	P.F.	88	A	129
	380-415	95.4					
EFF.	95.0	DESIGN	B	CODE	H		
COS	0.88	SER. F.	1.00	CC	010A		

Parts List		
Part Number	Description	Quantity
SA161923	SA 18E885Y196G1	1.000 EA
RA150470	RA 18E885Y196G1	1.000 EA
09FN3001D05	EXTERNAL FAN, PLASTIC	1.000 EA
18CB1001A83	KOBX, MACH. OPEN W/M63X1.5 & M8 GND HL	1.000 EA
18GS1007A01	GASKET, CONDUIT BOX X	1.000 EA
10YN0100K030	BOLT,M10 X 1.5 X 30MM HHCS YZ, DIN 933	4.000 EA
HW1021A10	WASHER DIAMETER = M10, SPRING STEEL,	4.000 EA
WD5005A07	TERM BLK KIT W/WD1320A03 ELEC AMPS 63-16	1.000 EA
HA6593A06	ADAPTER-WECO TERMINAL BRD, METRIC-E	1.000 EA
WD1201A01	TERM. STRIP KL 16/12/PA DS ELECTROVERT	1.000 EA
84YN0030J012	SCREW SOCKET HD M3 X 12MM LG	2.000 EA
HA6357A03	CONNECTOR MTG. BRACKET, VECTOR DRIVES	1.000 EA
19YW0040A012	SCREW, TAPTITE, ZN, M4 X 12MM LONG,	2.000 EA
HW1001A08	WASHER, #8 SPLT LK, ZN	2.000 EA
WD1000B25	BURNDY TERMINAL L125HP	1.000 EA
10YN0080K013	8MM X 13MM,HX HD CAP SCR,GRADE 5	1.000 EA
HW1021A08	WASHER DIAMETER = M8, SPRING STEEL,	1.000 EA
18EP1103A177	FREP TEFC 444-5-7T W/313 BRG., METRIC-E	1.000 EA
10YN0140K070	BOLT M14-1.50 X 70MM HHCS	4.000 EA
HW5100A16	WAVY WASHER W5408-053	1.000 EA
10YN0100K075	BOLT, M10X1.5X75MM HHCS GRADE 5	4.000 EA
HW4600B82	V-RING SLINGER 2.58 X 3.270 X 0.280	1.000 EA
18EP1103A178	FREP, MACH 314 BRG METRIC-E	1.000 EA
10YN0140K070	BOLT M14-1.50 X 70MM HHCS	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10YN0100K075	BOLT, M10X1.5X75MM HHCS GRADE 5	4.000 EA
18FH1002A42	STD FAN HSG (BLOWER MTG.) W/M8-1 TAP	1.000 EA
10YN0140K200	BOLT M14-1.50 X 200MM HHCS, GRADE 5	4.000 EA
HW1021A14	WASHER, M14 SPLIT-LOCK YZ	4.000 EA
HA6335A01	STD GRILLE 318 USE W/FANCOVER 18FH1002	1.000 EA
10YN0080K025	BOLT, M8 X 1.25 X 25MM HHCS YZ	3.000 EA
HW1021A08	WASHER DIAMETER = M8, SPRING STEEL,	3.000 EA
187X0033	HOLE PLUG, NEOPRENE AC GRILL 50 DURO.	1.000 EA
18CB1501A01	CONDUIT BOX LID, MODEL 318 OPEN	1.000 EA
18GS1008A01	GASKET CONDUIT BOX LID	1.000 EA
10YN0080A025	8MM X 25MM HEX HD	4.000 EA
HW1021A08	WASHER DIAMETER = M8, SPRING STEEL,	4.000 EA
HW2511F125	18MM X 11MM X 125MM LONG KEY W/ROUND END	1.000 EA
MJ5001A01	46-665 RED SEALER	0.031 QT
MJ5001A14	DYNAPRO SEAL, CP MOTORS VC#2508050 (603	0.041 EA
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB5040	INSTRUCT TAG, REPL W/MN416 OR MN416A01	1.000 EA
WD1000B33	T&B G973 RING TERMINAL 2AWG 3/8" STUD	6.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4017A07	.125 X 7.5 GREASE EXT (F/S)	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4001A01SP	DRAIN PLUG, PLASTIC (MICRO PLAS)	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MJ1000A75	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.400 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4001A01SP	DRAIN PLUG, PLASTIC (MICRO PLAS)	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025G05	MEDIUM CHARCOAL METALLIC GREY	0.150 GA
85XU0407A04	#4-7 X 1/4 DRIVE PIN	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LB1125C01	STD (STOCK) CARTON LABEL BALDOR WITH FLA	4.000 EA
LC0762	CONN LABEL, AC	1.000 EA
NP1954L	METRIC, ALUM, UL CSA CE, EFF, CD0382,	1.000 EA
18PA1002	PACKAGING GROUP (318 FRM)TDR 10923	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 10/13	1.000 EA

AC Induction Motor Performance Data

Record # 22707 - Typical performance - not guaranteed values

Winding: 18WGY196-R003	Type: 1856M	Enclosure: TEFC
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Nameplate Data				415 V, 50 Hz: Single Voltage Motor	
Rated Output (KW)	90			Full Load Torque	214 LB-FT
Volts	380-415			Start Configuration	direct on line
Full Load Amps	155-147			Breakdown Torque	860 LB-FT
R.P.M.	2965			Pull-up Torque	223 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	316 LB-FT
NEMA Design Code	N	KVA Code	H	Starting Current	1024 A
Service Factor (S.F.)	1			No-load Current	38.8 A
NEMA Nom. Eff.	95	Power Factor	88	Line-line Res. @ 25°C	0.0361 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	76°C
				Rotor inertia	15.3 LF ²

Load Characteristics 415 V, 50 Hz, 90 KW

% of Rated Load	25	50	75	100	125	150
Power Factor	68	85	91	92	91	91
Efficiency	91.1	94.4	95	95	94.4	93.9
Speed	2993	2986	2979	2972	2964	2955
Line amperes	52.8	81.4	114	150	188	228

Performance Graph at 415V, 50Hz, 90.0KW Typical performance - Not guaranteed values





