



PSE

MODBUS VARIABLES



DESCRIPTION OF MODBUS VARIABLES

The Modbus on refrigeration dryer PSE is Modicon standard (so 1-based addresses).

All the variables are access as Holding register (Modbus function FC03, 40000).

As standard configuration, RS-485 baudrate 19200, 8bit, Even, stop 1 address 16, you can change it by the touch screen from size PSE220 to PSE1800.

As standard configuration, IP address 10.0.0.10, port 502, you can change it by the touch screen.

Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
iVER	8960	-	UINT	RO	PLC software version	x	Yes	Yes	Yes
iB0	8961	-	INT	RO	Dew point temperature	1/10°C 1/10°F	Yes	Yes	Yes
iB2	8962	-	INT	RO	Evaporation temperature	1/10°C 1/10°F	Yes	Yes	Yes
iB3	8963	-	INT	RO	Ambient temperature	1/10°C 1/10°F	Yes	Yes	Yes



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Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
iB4	8964	-	INT	RO	Evaporation temperature (multicooler)	1/10°C 1/10°F	No	No	Only up to PSE750
iB5	8965	-	INT	RO	Suction temperature	1/10°C 1/10°F	Yes	Yes	Yes
iB6	8966	-	INT	RO	Out condensator temperature	1/10°C 1/10°F	Yes	Yes	Yes
iB7	8967	-	INT	RO	Out evaporator temperature	1/10°C 1/10°F	Yes	Yes	Yes
iB8	8968	-	INT	RO	Discharge temperature	1/10°C 1/10°F	Yes	Yes	Yes
iP1	8971	-	INT	RO	Refrigerant high pressure side	1/100bar	Yes	Yes	Yes
iP2	8972	-	INT	RO	Refrigerant low pressure side	1/100bar	No	No	Yes
iTA	8973	-	INT	RO	Compressor current consumption	1/100A	No	No	Yes
xRO	8974	-	BOOL	RO	Remote ON/OFF status request (TRUE is ON)	x	Yes	Yes	Yes
xHA1	8975	-	BOOL	RO	High pressure switch status (TRUE is OK)	x	Yes	Yes	Yes
xPI1	8976	-	BOOL	RO	Protection compressor motor status (TRUE is OK)	x	Yes	Yes	Yes
xLP	8977	-	BOOL	RO	Low pressure switch status (TRUE is OK)	x	Yes	Yes	Yes
xCS1	8978	-	BOOL	RO	Water presence in evaporator 1 (if FALSE)	x	Yes	Yes	Yes
xCS2	8979	-	BOOL	RO	Water presence in evaporator 2 (if FALSE)	x	No	No	Only up to PSE750
xCS3	8980	-	BOOL	RO	Water presence in evaporator 3 (if FALSE)	x	No	No	Only up to PSE1200
xPHC	8981	-	BOOL	RO	Sequence phase monitoring (TRUE is OK)	x	Yes	Yes	Yes


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Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
xQ1	8982	-	BOOL	RO	Protection fan motor 1 (TRUE is OK)	x	Yes	Yes	Yes
xQ2	8983	-	BOOL	RO	Protection fan motor 2 (TRUE is OK)	x	Yes	Yes	Yes
yKM1	8984	-	BOOL	RO	Compressor contactor (TRUE is ON)	x	Yes	Yes	Yes
yKM2	8985	-	BOOL	RO	Fan contactor (TRUE is ON)	x	Yes	Yes	Yes
yYV1	8986	-	BOOL	RO	Solenoid valve liquid return (TRUE is OPEN)	x	Yes	Yes	Yes
yYV2	8987	-	BOOL	RO	Solenoid valve bypass hot gas (TRUE is OPEN)	x	Yes	Yes	Yes
yYV3	8988	-	BOOL	RO	Solenoid valve condensate drain evaporator 1 (TRUE is OPEN)	x	Yes	Yes	Yes
yYV4	8989	-	BOOL	RO	Solenoid valve condensate drain evaporator 2 (TRUE is OPEN)	x	No	No	Only up to PSE750
yYV5	8990	-	BOOL	RO	Solenoid valve condensate drain evaporator 3 (TRUE is OPEN)	x	No	No	Only up to PSE1200
yPS	8992	-	BOOL	RO	Status dryer (TRUE if ON)	x	Yes	Yes	Yes
yaFS	8993	-	INT	RO	Fan speed control	1/10%	Yes	Yes	Yes
yaHGBV	8994	-	INT	RO	Position of electronic HGBV	1/10%	No	No	Yes
yaPDP	8995	-	INT	RO	Dew point analog output value	x	No	No	Yes
wAlarm	8996	-	WORD	RO	Alarm word	x	Yes	Yes	Yes
aILD	-	8996.0	BIT	RO	Alarm low dew point temperature	x	Yes	Yes	Yes
aILT	-	8996.1	BIT	RO	Alarm low evaporator temperature	x	Yes	Yes	Yes


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Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
alHT2	-	8996.2	BIT	RO	Alarm high discharge temperature	x	Yes	Yes	Yes
alHP	-	8996.3	BIT	RO	Alarm high pressure switch	x	Yes	Yes	Yes
alLP	-	8996.4	BIT	RO	Alarm low pressure switch	x	Yes	Yes	Yes
alLTA	-	8996.5	BIT	RO	Alarm low evaporator temperature (multicooler)	x	No	No	Only up to PSE750
alPI	-	8996.6	BIT	RO	Alarm motor compressor protection	x	Yes	Yes	Yes
alPH	-	8996.7	BIT	RO	Alarm phase monitoring	x	Yes	Yes	Yes
alCOM1	-	8996.8	BIT	RO	PLC communication alarm	x	No	Yes	Yes
alCOM2	-	8996.9	BIT	RO	PLC communication alarm	x	No	No	Yes
x	-	8996.10	BIT	RO	Not used	x	No	No	No
x	-	8996.11	BIT	RO	Not used	x	No	No	No
x	-	8996.12	BIT	RO	Not used	x	No	No	No
x	-	8996.13	BIT	RO	Not used	x	No	No	No
x	-	8996.14	BIT	RO	Not used	x	No	No	No
x	-	8996.15	BIT	RO	Not used	x	No	No	No
wWNR1	8997	-	WORD	RO	Warning word 1	x	Yes	Yes	Yes
wFB0	-	8997.0	BIT	RO	Fault probe B0	x	Yes	Yes	Yes
wFB2	-	8997.1	BIT	RO	Fault probe B2	x	Yes	Yes	Yes
wFB8	-	8997.2	BIT	RO	Fault probe B8	x	Yes	Yes	Yes
wFB4	-	8997.3	BIT	RO	Fault probe B4 (multicooler)	x	Yes	Yes	Yes
wFB5	-	8997.4	BIT	RO	Fault probe B5	x	Yes	Yes	Yes
wFB6	-	8997.5	BIT	RO	Fault probe B6	x	No	Yes	Yes
wFP1	-	8997.6	BIT	RO	Fault pressure probe high pressure side	x	Yes	Yes	Yes



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Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
wFP2	-	8997.7	BIT	RO	Fault pressure probe low pressure side	x	Yes	Yes	Yes
wHD	-	8997.8	BIT	RO	Warning high dew point	x	Yes	Yes	Yes
wHT1	-	8997.9	BIT	RO	Warning high discharge temperature	x	Yes	Yes	Yes
wFP1	-	8997.10	BIT	RO	Warning high pressure	x	Yes	Yes	Yes
wHB5	-	8997.11	BIT	RO	Warning high suction temperature	x	Yes	Yes	Yes
x	-	8997.12	BIT	RO	Not used	x	No	No	No
wLp2	-	8997.13	BIT	RO	Warning low pressure	x	No	No	Yes
wSR	-	8997.14	BIT	RO	Warning service time expired	x	Yes	Yes	Yes
wDR1	-	8997.15	BIT	RO	Warning condensate drain evaporator 1	x	Yes	Yes	Yes
wWNR2	8998	-	WORD	RO	Warning word 2	x	No	No	No
wDR2	-	8998.0	BIT	RO	Warning condensate drain evaporator 2	x	No	No	Only up to PSE750
wDR3	-	8998.1	BIT	RO	Warning condensate drain evaporator 3	x	No	No	Only up to PSE1200
	-	8998.2	BIT	RO		x	No	No	No
	-	8998.3	BIT	RO		x	No	No	No
	-	8998.4	BIT	RO		x	No	No	No
	-	8998.5	BIT	RO		x	No	No	No
	-	8998.6	BIT	RO		x	No	No	No
	-	8998.7	BIT	RO		x	No	No	No
	-	8998.8	BIT	RO		x	No	No	No
	-	8998.9	BIT	RO		x	No	No	No
	-	8998.10	BIT	RO		x	No	No	No
	-	8998.11	BIT	RO		x	No	No	No
	-	8998.12	BIT	RO		x	No	No	No
	-	8998.13	BIT	RO		x	No	No	No


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Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
	-	8998.14	BIT	RO		x	No	No	No
	-	8998.15	BIT	RO		x	No	No	No
<b>wIN</b>	8999	-	WORD	RO		x	No	No	No
<b>xRO</b>	-	8999.0	BIT	RO	Remote ON/OFF status request (TRUE is ON)	x	Yes	Yes	Yes
<b>xHA1</b>	-	8999.1	BIT	RO	High pressure switch status (TRUE is OK)	x	Yes	Yes	Yes
<b>xPI1</b>	-	8999.2	BIT	RO	Protection compressor motor status (TRUE is OK)	x	Yes	Yes	Yes
<b>xLP</b>	-	8999.3	BIT	RO	Low pressure switch status (TRUE is OK)	x	Yes	Yes	Yes
<b>xCS1</b>	-	8999.4	BIT	RO	Water presence in evaporator 1 (if FALSE)	x	Yes	Yes	Yes
<b>xCS2</b>	-	8999.5	BIT	RO	Water presence in evaporator 2 (if FALSE)	x	No	No	Only up to PSE750
<b>xCS3</b>	-	8999.6	BIT	RO	Water presence in evaporator 3 (if FALSE)	x	No	No	Only up to PSE1200
<b>xPHC</b>	-	8999.7	BIT	RO	Sequence phase monitoring (TRUE is OK)	x	Yes	Yes	Yes
<b>xQ1</b>	-	8999.8	BIT	RO	Protection fan motor 1 (TRUE is OK)	x	Yes	Yes	Yes
<b>xQ2</b>	-	8999.9	BIT	RO	Protection fan motor 2 (TRUE is OK)	x	Yes	Yes	Yes
<b>x</b>	-	8999.10	BIT	RO	Not used	x	No	No	No
<b>x</b>	-	8999.11	BIT	RO	Not used	x	No	No	No
<b>x</b>	-	8999.12	BIT	RO	Not used	x	No	No	No
<b>x</b>	-	8999.13	BIT	RO	Not used	x	No	No	No
<b>x</b>	-	8999.14	BIT	RO	Not used	x	No	No	No
<b>x</b>	-	8999.15	BIT	RO	Not used	x	No	No	No
<b>wOUT</b>	9000	-	WORD	RO		x	Yes	Yes	Yes



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Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
yKM1	-	9000.0	BIT	RO	Compressor contactor (TRUE is ON)	x	Yes	Yes	Yes
yKM2	-	9000.1	BIT	RO	Fan contactor (TRUE is ON)	x	Yes	Yes	Yes
yYV1	-	9000.2	BIT	RO	Solenoid valve liquid return (TRUE is OPEN)	x	Yes	Yes	Yes
yYV2	-	9000.3	BIT	RO	Solenoid valve bypass hot gas (TRUE is OPEN)	x	Yes	Yes	Yes
yYV3	-	9000.4	BIT	RO	Solenoid valve condensate drain evaporator 1 (TRUE is OPEN)	x	Yes	Yes	Yes
yYV4	-	9000.5	BIT	RO	Solenoid valve condensate drain evaporator 2 (TRUE is OPEN)	x	No	No	Only up to PSE750
yYV5	-	9000.6	BIT	RO	Solenoid valve condensate drain evaporator 3 (TRUE is OPEN)	x	No	No	Only up to PSE1200
yPS	-	9000.7	BIT	RO	Status dryer (TRUE if ON)	x	Yes	Yes	Yes
x	-	9000.8	BIT	RO	Not used	x	No	No	No
x	-	9000.9	BIT	RO	Not used	x	No	No	No
x	-	9000.10	BIT	RO	Not used	x	No	No	No
x	-	9000.11	BIT	RO	Not used	x	No	No	No
x	-	9000.12	BIT	RO	Not used	x	No	No	No
x	-	9000.13	BIT	RO	Not used	x	No	No	No
x	-	9000.14	BIT	RO	Not used	x	No	No	No
x	-	9000.15	BIT	RO	Not used	x	No	No	No
R	9001	-	-	RO	Reserved	x	No	No	No
R	9002	-	-	RO	Reserved	x	No	No	No
R	9004	-	-	RO	Reserved	x	No	No	No
R	9006	-	-	RO	Reserved	x	No	No	No
R	9008	-	-	RO	Reserved	x	No	No	No
R	9009	-	-	RO	Reserved	x	No	No	No
R	9010	-	-	RO	Reserved	x	No	No	No
R	9011	-	-	RO	Reserved	x	No	No	No



## Parker Hannifin Manufacturing S.r.l.

Tag	Address	Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800	
R	9012	-	-	RO	Reserved	x	No	No	No
R	9013	-	-	RO	Reserved	x	No	No	No
R	9014	-	-	RO	Reserved	x	No	No	No
R	9015	-	-	RO	Reserved	x	No	No	No
R	9016	-	-	RO	Reserved	x	No	No	No
R	9017	-	-	RO	Reserved	x	No	No	No
R	9018	-	-	RO	Reserved	x	No	No	No
R	9019	-	-	RO	Reserved	x	No	No	No
R	9020	-	-	RO	Reserved	x	No	No	No
R	9021	-	-	RO	Reserved	x	No	No	No
R	9022	-	-	RO	Reserved	x	No	No	No
R	9022	-	-	RO	Reserved	x	No	No	No
R	9023	-	-	RO	Reserved	x	No	No	No
R	9024	-	-	RO	Reserved	x	No	No	No
R	9025	-	-	RO	Reserved	x	No	No	No
R	9026	-	-	RO	Reserved	x	No	No	No
R	9027	-	-	RO	Reserved	x	No	No	No
R	9028	-	-	RO	Reserved	x	No	No	No
R	9029	-	-	RO	Reserved	x	No	No	No
R	9030	-	-	RO	Reserved	x	No	No	No
R	9031	-	-	RO	Reserved	x	No	No	No
R	9032	-	-	RO	Reserved	x	No	No	No
R	9033	-	-	RO	Reserved	x	No	No	No
R	9034	-	-	RO	Reserved	x	No	No	No
R	9035	-	-	RO	Reserved	x	No	No	No
R	9036	-	-	RO	Reserved	x	No	No	No
R	9037	-	-	RO	Reserved	x	No	No	No
R	9038	-	-	RO	Reserved	x	No	No	No
R	9039	-	-	RO	Reserved	x	No	No	No
R	9040	-	-	RO	Reserved	x	No	No	No
R	9041	-	-	RO	Reserved	x	No	No	No
R	9042	-	-	RO	Reserved	x	No	No	No
R	9043	-	-	RO	Reserved	x	No	No	No
R	9044	-	BOOL	RO	Compressor working mode	x	Yes	Yes	Yes




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Tag	Address	Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
				(TRUE if continuous)				
R	9045	-	-	RO	Reserved	x	No	No
R	9046	-	-	RO	Reserved	x	No	No
R	9047	-	-	RO	Reserved	x	No	No
R	9048	-	-	RO	Reserved	x	No	No
R	9049	-	-	RO	Reserved	x	No	No
R	9050	-	-	RO	Reserved	x	No	No
R	9051	-	-	RO	Reserved	x	No	No
R	9052	-	-	RO	Reserved	x	No	No
R	9053	-	-	RO	Reserved	x	No	No
R	9054	-	-	RO	Reserved	x	No	No
R	9055	-	-	RO	Reserved	x	No	No
R	9056	-	-	RO	Reserved	x	No	No
R	9057	-	-	RO	Reserved	x	No	No
R	9058	-	-	RO	Reserved	x	No	No
R	9059	-	-	RO	Reserved	x	No	No
R	9060	-	-	RO	Reserved	x	No	No
R	9061	-	-	RO	Reserved	x	No	No
R	9062	-	-	RO	Reserved	x	No	No
R	9063	-	-	RO	Reserved	x	No	No
R	9064	-	-	RO	Reserved	x	No	No
R	9065	-	-	RO	Reserved	x	No	No
R	9066	-	-	RO	Reserved	x	No	No
R	9067	-	-	RO	Reserved	x	No	No
R	9068	-	-	RO	Reserved	x	No	No
R	9069	-	-	RO	Reserved	x	No	No
R	9070	-	-	RO	Reserved	x	No	No
R	9071	-	-	RO	Reserved	x	No	No
R	9072	-	-	RO	Reserved	x	No	No
R	9073	-	-	RO	Reserved	x	No	No
R	9074	-	-	RO	Reserved	x	No	No
R	9075	-	-	RO	Reserved	x	No	No
R	9076	-	-	RO	Reserved	x	No	No
R	9077	-	-	RO	Reserved	x	No	No
R	9078	-	-	RO	Reserved	x	No	No



## Parker Hannifin Manufacturing S.r.l.

Tag	Address	Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
R	9079	-	-	RO	Reserved	x	No	No
R	9080	-	-	RO	Reserved	x	No	No
R	9081	-	-	RO	Reserved	x	No	No
R	9082	-	-	RO	Reserved	x	No	No
R	9083	-	-	RO	Reserved	x	No	No
R	9084	-	-	RO	Reserved	x	No	No
R	9085	-	-	RO	Reserved	x	No	No
mC37	9086	-	-	RO	Energy saving indicator	%	Yes	Yes
R	9087	-	-	RO	Reserved	x	No	No
R	9088	-	-	RO	Reserved	x	No	No
R	9089	-	-	RO	Reserved	x	No	No
R	9090	-	-	RO	Reserved	x	No	No
R	9091	-	-	RO	Reserved	x	No	No
mAlarm	9092	-	BOOL	RO	TRUE if there is any alarms	x	Yes	Yes
mWarn	9093	-	BOOL	RO	TRUE if there is any warnings	x	Yes	Yes
R	9094	-	-	RO	Reserved	x	Yes	Yes
cmdON	9095	-	BOOL	RW	ON/OFF request for dryer	x	Yes	Yes
cmdDRN	9096	-	BOOL	RW	Request to cycle condensate drain (TRUE if open condensate drain for 1 cycle)	x	Yes	Yes
R	9096	-	-	RO	Reserved	x	No	No
R	9097	-	-	RO	Reserved	x	No	No
R	9098	-	-	RO	Reserved	x	No	No
R	9099	-	-	RO	Reserved	x	No	No
R	9100	-	-	RO	Reserved	x	No	No
R	9101	-	-	RO	Reserved	x	No	No
R	9102	-	-	RO	Reserved	x	No	No
R	9103	-	-	RO	Reserved	x	No	No
R	9104	-	-	RO	Reserved	x	No	No
R	9105	-	-	RO	Reserved	x	No	No
R	9106	-	-	RO	Reserved	x	No	No
R	9107	-	-	RO	Reserved	x	No	No



## Parker Hannifin Manufacturing S.r.l.

Tag	Address		Type	Access	Description	u.m.	PSE120 PSE180	PSE220 PSE350	PSE460 PSE1800
cmdRST	9108	-	BOOL	RW	Reset blocking alarms (TRUE if RESET)	x	Yes	Yes	Yes



### Parker Hannifin Manufacturing S.r.l.

Sede Legale: Via Privata Archimede, 1- 2009 Corsico (MI) Italy

Sede Operativa: **Gas Separation and Filtration Division EMEA** - Strada Zona Industriale, 4  
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