

DATENPUNKTLISTE DATAPOINTLIST

Modbus-Protokoll für KHS CoolFlow Kaltwasser-Erzeuger 618 01 001 00 + 618 01 002 00
Modbus-Protocol for KHS CoolFlow cold water Chiller 618 01 001 00 + 618 01 002 00

1. Transmission Format

Baud Rate	4800bps
Start bit	1
Byte width	8
Parity	N
Stop bits	1
SLAVE address	97

2. Packet Format

Address	Function	Data	CRC checksum
8bits	8bits 03: Function of reading multi registers 16: Function of presenting multi registers	N*8bits	16bits

3. Data types

Data Types	Description
TEMP2	Unsigned byte, Length: 8 byte, Unit: 1, when 1 is shown, transmitting data is 1
TEMP3	Unsigned byte, Resolution: 0.5°C, Formula: $T * 2 + 60$, Temp Range: -30~97°C (When showing 25 degree, the transmitting data is 110 according to the above Formula)
TEMP4	Unsigned byte, resolution: 0.1bar, Formula: $T * 10$, Range: 0~50bar (When showing 25 bar, the transmitting data is 250 according to the above Formula)
TEMP5	Unsigned byte, resolution: 1°C, Formula: $T + 30$, Temp Range: -30~224°C
TEMP6	Unsigned byte, Formula: $T/6$
TEMP7	Unsigned byte, Formula: $T/10$

4. Mailing address

Function	Code	Content	Byte length	Mode	Description	Type	Address
03/16/06	-	ON/OFF	double byte	Read/Write	0-off/1-on	TEMP2	9001
03/16/06	-	MODE	double byte	Read/Write	0-cooling/1-heating	TEMP2	9002
03/16/06	P01	Inlet temperature (Cool Mode)/Setting	double byte	Read/Write	P07~P08	TEMP3	1071
03/16/06	P02	Inlet temperature (Heat Mode)/Setting	double byte	Read/Write	P09~P10	TEMP3	1072
03/16/06	P03	Return difference (Cool Mode)/constant temperature/OFF	double byte	Read/Write	0.5~10	TEMP3	1073
03/16/06	P04	Temperature difference (Cool Mode)/constant temperature/ON	double byte	Read/Write	0~10	TEMP3	1074
03		Compressor output	double byte	Read		TEMP2	8314
03		Water pump output	double byte	Read		TEMP2	8315
03		4 way valve output	double byte	Read		TEMP2	8316
03		Fan motor output	double byte	Read		TEMP2	8317
03		Antifreezing heater	double byte	Read		TEMP2	8327
03		Compressor crankcase heater	double byte	Read		TEMP2	8328
03		spray valve	double byte	Read		TEMP2	8329
03		Auxiliary Electric Heating	double byte	Read		TEMP2	8330
03		Waring output	double byte	Read		TEMP2	8331
03	U01	Water inlet temperature	double byte	Read		TEMP3	8307
03	U02	Water outlet temperature	double byte	Read		TEMP3	8308
03	U03	Suction temperature	double byte	Read		TEMP3	8309
03	U04	Exhaust temperature	double byte	Read		TEMP5	8310
03	U05	Ambient temperature	double byte	Read		TEMP3	8311
03	U06	Coil temperature	double byte	Read		TEMP3	8322
03	U07	Low pressure	double byte	Read		TEMP4	8312
03	U08	High pressure	double byte	Read		TEMP4	8313
03	U09	EEV steps	double byte	Read		TEMP2	8319
03	U10	Actual frequency	double byte	Read		TEMP2	8320
03	U11	Setting frequency	double byte	Read		TEMP2	8321
03	U12	Suction super heat*10	double byte	Read		TEMP7	8323
03	U13	Exhaust super heat	double byte	Read		TEMP7	8324
03	U14	Actual fan speed of Fan1	double byte	Read		TEMP2	8325
03	U15	Actual fan speed of Fan2	double byte	Read		TEMP2	8326
03	bit0	Water inlet temp. sensor failure	double byte	Read		TEMP2	8901
03	bit1	Water outlet temp. sensor failure	double byte	Read		TEMP2	8901
03	bit2	Suction temp. sensor failure	double byte	Read		TEMP2	8901
03	bit3	Exhaust temp. sensor failure	double byte	Read		TEMP2	8901
03	bit4	Suction pressure sensor failure	double byte	Read		TEMP2	8901
03	bit5	Exhaust pressure sensor failure	double byte	Read		TEMP2	8901
03	bit6	Ambient temp. sensor failure	double byte	Read		TEMP2	8901
03	bit7	High pressure protection (HP)	double byte	Read		TEMP2	8901
03	bit8	Low pressure protection (LP)	double byte	Read		TEMP2	8901
03	bit9	Water flow protection	double byte	Read		TEMP2	8901
03	bit10	Exhaust over-temperature protection	double byte	Read		TEMP2	8901
03	bit11	Antifreeze protection	double byte	Read		TEMP2	8901
03	bit12	Winter Primary antifreeze protection	double byte	Read		TEMP2	8901
03	bit13	Winter Secondary antifreeze protection	double byte	Read		TEMP2	8901

Function	Code	Content	Byte length	Mode	Description	Type	Address
03	bit14	Protection of low ambient temperature for heat pump work	double byte	Read		TEMP2	8901
03	bit15	Defrosting icon	double byte	Read		TEMP2	8901
03		Inverter Driver board stop icon 1	double byte	Read		TEMP2	8902
03		Inverter Driver board warning icon	double byte	Read		TEMP2	8903
03		AC input under-voltage protection	double byte	Read		TEMP2	8904
03		AC input over-current protection / power off	double byte	Read		TEMP2	8905
03		DC bus over-voltage protection	double byte	Read		TEMP2	8906
03		IPMTemp	double byte	Read		TEMP2	8907
03		Inverter Driver board stop icon 2	double byte	Read		TEMP2	8908
03	bit0	Communication failure between driver and main control board	double byte	Read		TEMP2	8909
03	bit1	Coil temp. sensor failure	double byte	Read		TEMP2	8909
03	bit2	Electrical heater over-heat protection	double byte	Read		TEMP2	8909
03	bit3	DC fan motor 1 faulty	double byte	Read		TEMP2	8909
03	bit4	DC fan motor 2 faulty	double byte	Read		TEMP2	8909
03	bit5	Communication fault between fan speed regulator and main board.	double byte	Read		TEMP2	8909