

# Electronic Control

## XW60LH



### KEYBOARD

To display and modify target set point; in programming mode it selects a parameter or confirm an operation.  
**SET** Holding it pressed for 3 seconds, when max. or min. temperature is displayed it will be erased.



To see max. recorded temperature; in programming mode it browses the parameter codes or increases the displayed value.  
 Holding it pressed for 3 seconds the fast freezing cycle starts.



To see min. recorded temperature; in programming mode it browses the parameter codes or decreases the displayed value.



Holding it pressed for 3 seconds the defrosting starts.



Switch ON and OFF the cold room light.



Switch ON and OFF the unit.

### OPERATION LEDS

LED	MODE	FUNCTION
	ON	The compressor is running.
	FLASHING	Anti-short cycle safety device on. Pressure switch/es opened (pressure switch).
	ON	The fan is running.
	FLASHING	Fan delay start-up after defrost.
	ON	Defrost enabled.
	FLASHING	Defrost is finished. Drip time in progress.
	ON	Fast freezing mode on.
	ON	Energy saving mode on. Digital input set as active energy saving mode (depending on the model).
	ON	Cold room light on.

### ALARM SIGNAL

Message	Cause	Output
P1	Thermostat probe failure	Alarm output ON; Compressor according "Con" and "COF"
P2	Evaporator probe failure	Alarm output ON; Defrost finish by time "MDF"
P3	Probe 3 failure	Alarm output ON.
P4	Probe 4 failure	Alarm output ON.
HA	High cold room temperature	Alarm output ON.
LA	Low cold room temperature	Alarm output ON.
HA2	High condensing temperature	Alarm output ON; it depends on "AC2" parameter.
LA2	Low condensing temperature	Alarm output ON; it depends on "bLL" parameter.
dA	Door switch alarm	Alarm output ON.
EA	External alarm	Alarm output ON.
CA	Pressure switch alarm i1F=bAL/PAL	All outputs OFF.

### PARAMETER LIST

	Code	Description	Range	Default		List
				MT	BT	
PROBES	Hy	Set point differential.	0,1+25,5°C	2,0		Pr1
	LS	Minimum set point.	-50,0°C+SET	-5	-25	Pr2
	US	Maximum set point.	SET+110,0°C	10	-15	Pr2
	Ot	Thermostat probe calibration.	-12,0+12,0°C		0	Pr1
	P2P	Evaporator probe presence (defrost): n=no (defrost by time) ; y=yes (defrost by time and temperature)	n-y		y	Pr2
	oE	Evaporator probe calibration.	-12,0+12,0°C		0	Pr2
	P3P	Third probe presence: n=no; y=yes.	n-y		n	Pr2
	O3	Third probe calibration.	-12,0+12,0°C		0	Pr2
	P4P	Fourth probe presence: n=no; y=yes.	n-y		y	Pr2
	O4	Fourth probe calibration.	-12,0+12,0°C		0	Pr2

	Code	Description	Range	Default		List		
				MT	BT			
REGULATION	OdS	Time in which functions excluding light are not allowed to start- up.	0+255min		1	Pr2		
	AC	Anti-short cycle delay.	0+30min		4	Pr1		
	Ac1	Delay start-up of second compressor.	0+255sec		120			
	rtr	Percentage of the second and first probe for regulation.	0+100		100			
	CCt	Fast freezing mode time (minutes).	0+23h 50min		0h 30min	Pr2		
	CCS	Set point for continuous cycle. (fast cooling/freezing)			-2	-22		
	Con	Time interval during which the compressor is working after probe default.	0+255min		15	Pr2		
	COF	Time interval during which the compressor is stopped due to probe default.	0+255min		15	Pr2		
	CF	Temperature measurement unit.	°C-°F		°C	Pr2		
	rES	Resolution integer/decimal point (only if CF=°C): in (integer)=1 °C; de (decimal)=0,1 °C.	in-de		De	Pr1		
DISPLAY	Lod	Probe shown by display.	P1, P2, P3, 1r2		P1	Pr2		
	rEd	Remote display: P1=Thermostat probe; P2=Evaporator probe; P3=Condenser probe; 1r2=P1-P2	P1, P2, P3, 1r2		P1	Pr2		
	dLy	Display delay.			0	Pr2		
	dtr	Percentage of P1-P2 for visualization by display.	1+99		50	Pr2		
	tdF	Defrost type. (DO NOT MODIFY) rE=electrical heater; rT=off time; in=hot gas injection.	rE-rT-in		In	Pr1		
	dFP	Probe selection defrost.	P1-P2-P3-1r2		P2			
	dtE	Defrosting end temperature.	-50,0+110,0 °C		20,0	Pr1		
	ldF	Interval between defrosting cycles.	1+120 h		3 h	Pr1		
	MdF	Maximum defrosting length.	0+255 min		20	30	Pr1	
	dSd	Defrosting start delay.	0+99 min		0	Pr2		
DEFROST	dFd	Display during defrost: rT=real temperature; it=last recorded temperature; Set=set point; dEF="dEF" message.			it	Pr2		
	dAd	Delay after defrosting to display cold room temperature.	0+255min		15	Pr2		
	Fdt	Time from defrosting end to compressor starting-up (draining time).	0+60 min		2	Pr2		
	dPO	Displayed if defrosting after starting-up.	n-y		n	Pr2		
	dAF	Defrost delay after fast freezing.	0+23h 50min		2,0h 0min	Pr2		
	FANS	FnC	Fans operating mode. With compressor @ / always on (O) / during defrosting (y=yes / n=no).	C-n, C-y, O-n, O-y		C-n	Pr2	
		Fnd	Fans operation delay after defrosting.	0+255min		3	4	Pr2
		FCt	Temperature differential to avoid fan short cycles.	0+50°C		0		
		FSI	Fans stop temperature.	-50,0+110,0°C		10	0	Pr2
		Fon	Fans ON time with compressor OFF.	0+15min		0	Pr2	
FoF		Fans OFF with compressor OFF.	0+15min		0	Pr2		
FAP		Probe selection for fan management.	nP-P1-P2-P3-P4		P2	Pr2		
ACH		Kind of regulation for auxiliary relay.	CL+Ht		CL	Pr2		
SAa		Set point for auxiliary key.	-55,0°C+15,0°C		0	Pr2		
SHy		Differential for auxiliary output.	0,1+25,5°C		2	Pr2		
AUXILIAR	ArP	Probe selection for auxiliary.	nP-P1-P2-P3-P4		nP	Pr2		
	Sdd	Auxiliary relay off during defrost.	yes+no		no	Pr2		
	ALP	Probe selection for temperature alarms.	nP-P1-P2-P3-P4		P1	Pr2		
	ALC	Temperature alarm configuration (ALU and ALL): rE=relative; Ab=absolute.	rE-Ab		rE	Pr2		
	ALU	Differential related to setpoint for maximum temperature alarm.	rE: -50,0+110,0°C Ab: 0,0+50,0°C		5,0	Pr1		
	ALL	Differential related to setpoint for minimum temperature alarm.	rE: -50,0+110,0°C Ab: 0,0+50,0°C		5,0	Pr1		
	AFH	Temperature alarm and fan differential.	0,1+25,5°C		2,0	Pr2		
	ALd	Temperature alarm delay.	0+255min		0	Pr2		
	dAO	Delay of temperature alarm after start-up.	0+23h 50min		1h 0min	Pr2		
	AP2	Probe selection for temperature alarm of condenser.	nP-P1-P2-P3-P4		P4			
ALARMS	AL2	Condenser low temperature alarm.	-55,0+150°C		-40	Pr2		
	Au2	Condenser high temperature alarm.	-55,0+150°C		65	Pr2		
	Ah2	Differential for temperature condenser alarm recovery.	0,1+25,5°C		5	Pr2		
	Ad2	Condenser temperature alarm delay.	0+255min		1	Pr2		
	da2	Condenser temperature alarm exclusion at start-up	0+23h 50min		1h 30min	Pr2		
	bLL	Compressor off with low temperature alarm of condenser.	yes+no		no	Pr2		
	AC2	Compressor off with high temperature alarm of condenser.	yes+no		yes	Pr2		
	tbA	Alarm signal silencing by pressing a key.	n-y		n	Pr2		
	oA3	Third relay configuration (auxiliary relay): dEF=do not select; FAN=do not select; Alr=alarm; Lig=room light; AUS=Aux; onF=always on; dB=neutral zone; cP2=second compressor; dF2=do not select.	dEF-FAN-Alr-Lig-AUS-onF-dB-CP2-dF2-HES		Lig	Pr2		
	AOP	Alarm relay polarity.	CL-OP		OP	Pr2		
DIGITAL INPUTS	i1P	Door microswitch polarity: CL=Closed (the digital input is activated by closing the contact). OP=Opened (the digital input is activated by opening the contact).			CL-OP	OP	Pr2	
	i1F	Digital input configuration: PAL=pressure switch alarm.	EAL, bAL, PAL, dFr, AUS, ES, onF		PAL	Pr2		
	did	Time interval to calculate the number of the pressure switch activation.	0+255min		60	Pr2		
	iP2	Second digital input polarity: CL=Closed (the digital input is activated by closing the contact). OP=Opened (the digital input is activated by opening the contact).			CL-OP	OP	Pr2	
	i2F	Digital input 2 configuration: EAL=external alarm; bAL=serious alarm.	EAL-bAL-PAL-dor-dEF-AUS-ht- FAN-ES-onF-HdF		dor	Pr2		
	d2d	Second digital input alarm delay.	0+255min		15	Pr2		
	nPS	Number of activation of the pressure switch, during the "did" interval, before signalling the alarm event "PAL".	0+15		8	Pr2		
	odc	Compressor status when open door: CPr=Compressor off; Fan=Fan off; F_C=Compressor and fan off.	no-Fan-CPr-F_C		F_C	Pr2		
	rrd	Outputs restart after door open alarm.	n-y		y	Pr2		
	HES	Delta temperature during Energy Saving cycle.	-30,0+30,0°C		2	Pr2		
OTHERS	Adr	Serial address: identifies the instrument address when connected to a ModBUS compatible monitoring system.	1+247		1	Pr1		
	rEL	Software version.	Readable only			Pr2		
	Ptb	Dixell map code.	Readable only			Pr2		
	pbC	Type of probes	PTC-NTC		NTC	Pr1		
	onF	ON/OFF key enabling. nu=disables; OFF=enabled; ES=not set	No-OFF-ES		OFF	Pr1		