

H411V5 User manual

doc H411V5



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1 Parameter list

Rem	Parameter	Description	Minimum	Maximum	Default Unit
ixeiii.	S	Functions about storage	iviiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Ivia	Delault Ollit
	St	Functions about storage temperature			
	t0	storage room temperature	-55.0	145.0	12.0 °C
	_db		0.0	50.0	0.0 K
	dbd	differential	0.0	50.0	0.2 K
		safety maximum room temperature	-55.0	45.0	21.0 °C
	_tL	safety minimum room temperature	-55.0 0.0	45.0 50.0	10.0 °C 0.2 K
	_td SMM	safety temperature differential storage room humidity	0.0	100.0	90.0 %
		differential	0.0	50.0	5.0 %
	SA	Functions about air renew during storage	0.0	30.0	3.0 /0
1		enable air renew during storage - reset timers	oFF	on	oFF /
		immediate delay before first air renew	0	194 4:20:15	0 dd hh:mm:ss
	dA7	on-time duration in the air renew cycle	0	194 4:20:15	30:00 dd hh:mm:ss
2		period of air renew cycle		194 4:20:15	12:00:00 dd hh:mm:ss
	SAh	, ,	oFF	_on	_on /
	dAF	forced air renew duration		194 4:20:15	30:00 dd hh:mm:ss
	SAo	, ,	oFF	_on	oFF /
	S2H	•	oFF	on	oFF /
	S2r S2Y	enable it also during ripening enable it also when rYA is set	oFF oFF	_on	oFF / oFF /
3			0.0	_on 100.0	100.0 %
3	523 S2d	CO2 concentration set point	0.0	50.0	5.0 %
	Fd	Functions about defrost duration and timing	0.0	50.0	J.J / U
4	_	· · · · · · · · · · · · · · · · · · ·	0	194 4:20:15	0 dd hh:mm:ss
·	Fdd	on-time duration of the defrost		194 4:20:15	30:00 dd hh:mm:ss
	Fdg	dripping time after defrost	0	194 4:20:15	2:00 dd hh:mm:ss
	FdE	evaporator fan activation delay after the defrost	0	194 4:20:15	15:00 dd hh:mm:ss
2		overall period of the defrost	0	194 4:20:15	4:00:00 dd hh:mm:ss
	FF_	Functions about forced defrost			
	FFh	enable forced defrost by keyboard short cut	oFF	_on	_ ′
_	FFd			194 4:20:15	30:00 dd hh:mm:ss
5	FFo	start immediate forced defrost	oFF	_on	oFF /
6	FP_ FPt	Functions about defrost preference defrost type: 0=none / 1=pause / 2=air / 3=electric / 4=hot gas / 5=heat pump /	0	255	2 /
U	111	6=heat pump by hp	U	255	2 /
	Ft	Functions about defrost temperature			
7	Ftt	defrost stop temperature	-55.0	146.0	6.0 °C
	r	Functions about ripening			
	rH_	Enable ripening functions and short cut			
8		enable ripening functions - reset timers	oFF	_on	oFF /
	rrh	enable toggling between ripening and storage by keyboard short cut	oFF	_on	_on /
	rt_	Functions about ripening temperature and humidity	0	104 4:00:15	0 44 66
	d0 t1	immediate delay before starting ripening ripening temperature nr. 1	-55.0	194 4:20:15 45.0	0 dd hh:mm:ss 16.5 °C
		duration of temperature nr. 1			4 0:00:00 dd hh:mm:ss
	t2	ripening temperature nr. 2	-55.0	45.0	15.5 °C
	 d2	, , ,			1 0:00:00 dd hh:mm:ss
	t3	ripening temperature nr. 3	-55.0	45.0	14.5 °C
	_d3	duration of temperature nr. 3	0	194 4:20:15	0 dd hh:mm:ss
	t4	ripening temperature nr. 4	-55.0	45.0	14.5 °C
	_d4	duration of temperature nr. 4		194 4:20:15	0 dd hh:mm:ss
9	_t5	ripening temperature nr. 5	-55.0	45.0	14.5 °C
	rMM		0.0	100.0	90.0 %
	rMd r∨	ripening humidity differential	0.0	50.0	5.0 %
10	rY_ rYH	Functions about ethylene enable ethylene injection - reset timers	oFF	00	oFF /
11	YYb	, ,	oFF	_on on	oFF /
- 11	rYY	ripening ethylene concentration	0.0	99.0	25.0 10*ppm
	rYd	ripening ethylene concentration differential	0.0	99.0	5.0 10*ppm
12	dY0	immediate delay before starting ripening		194 4:20:15	0 dd hh:mm:ss
13	$_{\sf tY}$	minimum temperature before injecting ethylene	-55.0	45.0	16.0 °C
	dY2	first ethylene injection duration	0	194 4:20:15	30:00 dd hh:mm:ss
	_nY	number of following ethylene cycles of injection	0	255	0 /
14	dY3	delay between first ethylene injections end and following cycles			1 0:00:00 dd hh:mm:ss
1.5	dY4	on-time duration of following ethylene injection cycles		194 4:20:15	30:00 dd hh:mm:ss
15	dY5	period of following ethylene injection cycles			12:00:00 dd hh:mm:ss
	rYh dYF	enable forced ethylene injection by keyboard short cut forced ethylene injection duration	oFF	_on 194 4:20:15	_on / 30:00 dd hh:mm:ss
	rYo	start / stop forced ethylene injection	oFF	194 4:20:15 on	oFF /
16	rYA	first ethylene injection performed but air renew not yet	oFF	_on	oFF /
	rA_	Functions about air renew during ripening			,
	_	<u> </u>			

Rem.	Parameter	Description	Minimum	Maximum	Default	Unit
	rAH	enable air renew cycles during ripening - reset timers	oFF	_on	oFF	/
	nA	number of air renew cycles	0	99	8	/
14	dA3	delay between first ethylene injection end and first air renew end	0	194 4:20:15	1 0:00:00	dd hh:mm:ss
	dA4	on-time duration in the air renew cycle		194 4:20:15		dd hh:mm:ss
15	dA5	period of air renew cycle		194 4:20:15		dd hh:mm:ss
	rAh	enable forced air renew by keyboard short cut	oFF	_on	_on	,
	rAF	forced air renew duration		194 4:20:15		dd hh:mm:ss
	rAo	start / stop forced air renew	oFF	_on	oFF	/
	H	Heating				
	HP_	Heating preference	0	255	2	/
	HPP	9	0	255	2	/
	HFP	pump / 5=ihp2 force heating during defrost	oFF	on	oFF	/
	n	Functions about fans	011	_011	011	/
	nU	Functions about depression fans				
	_	number of depression fans during storage	0	3	2	/
	nUr	number of depression fans during ripening	0	3	3	
	nU0	number of depression fans when refrigeration is required but does not work	0	3	1	
	nUd	delay before establishing that refrigeration does not work	0	194 4:20:15	30:00	dd hh:mm:ss
17	nS0	speed regulation of depression fans when refrigeration does not work	0	255	32	/
	nS1	speed regulation of depression fan nr. 1 during storage	0	255	128	/
	nS2	speed regulation of depression fan nr. 2 during storage	0	255	128	•
	nS3	speed regulation of depression fan nr. 3 during storage	0	255	128	
	nr1	speed regulation of depression fan nr. 1 during ripening	0	255	255	
	nr2	speed regulation of depression fan nr. 2 during ripening	0	255	255	
	nr3	speed regulation of depression fan nr. 3 during ripening	0	255	255	
	nH1	activate on board speed regulation of depressure fan nr. 1	oFF	_on	oFF	
	nH2	activate on board speed regulation of depressure fan nr. 2	oFF	_on	oFF	· .
	nH3	1 0 1	oFF	_on	oFF	/
	nE	Functions about evaporator fans				,
		force evaporator fans when refrigeration is off	oFF	_on	oFF	
		force evaporator fans when humidification is on	oFF	_on	oFF	
	nE0	enable evaporator fans when refrigeration is required but does not work	oFF	_on	oFF	/
	P	Functions about master preferences				
	Pd_ Pd_	Functions about network address	0	254	1	1
		master address for global network communication	0	254	1	
	Pd3 Pd2	number of slaves connected to this master number of auxiliary masters connected to this master	1 0	2 2	2 2	
	PO	Output assignment	U	2	2	/
		assign out-2 relay to: 0=alarm / 1=humidifier / 2=defrost / 3=OUT-1	0	255	1	/
	c 1 02	Functions about door and light	U	233	1	/
	cO	Functions about door				
18		enable door operation from keyboard	oFF	on	on	/
19	cOF		oFF	on	on	
20	cOd	delay between pushing button and door opening or closure		194 4:20:15		dd hh:mm:ss
		enable door automatic closure	oFF	on	oFF	/
	cCd	delay of door automatic closure	0	194 4:20:15		dd hh:mm:ss
	cOU	enable depressure, refrigeration and other output when door is not closed	oFF	on	oFF	/
	cOY	enable door opening after first ethylene injection and before first air renew	oFF	on_	on	/
	cl_	Functions about light		_		
21	cIO	switch on the light during door operation	oFF	_on	_on	/
	cIH	switch on the light when the door is open and off when closed	oFF	_ _on	_on	/
22	clo	switch off the light automatically if it has been switched on from outside	oFF	_on	_on	
	cld	delay of light automatic switch off	0	194 4:20:15	30	dd hh:mm:ss
	cc	Functions about curtain operation				,
23	cch	enable curtain operation from keyboard	oFF	_on	oFF	
24	ccc	keyboard in curtain mode	oFF	_on	oFF	
21	ccO	enable curtain operation when door is not open	oFF	_on	oFF	•
21	ccl	enable curtain operation when light is off	oFF	_on	oFF	/
	V	Functions about electronic expansion valve				
25	νΡ	Functions about electronic expansion valve preference	, F.F.		<u> </u>	/
25	vPH vpp	enable electronic expansion valve	oFF	_on 255	_on	•
26	vPP vPd	refrigerant gas type: 0=R134A / 1=R404A / 2=R507A / 3=R22 / 4=R407C network originating address of the pressure broadcast	0	255 255	0	
26	vra vt	Functions about electronic expansion valve temperature	U	∠55	U	1
27	vtt_	wanted overheating (similar to Danfoss thermostatic overheating spring regulation)	0.0	99.0	8.0	K
28	vtH	maximum overheating (similar to Danioss thermostatic overheating spring regulation)	0.0	99.0	99.0	
29	vtL	minimum overheating	0.0	99.0	6.0	
29	vtU	maximum pressure allowed in the suction line (similar to Danfoss MOP)	0.0	30.0		(gauge) bar
	vd	Functions about electronic expansion valve timing	0.0	50.0	10.0	(eage) bai
30	vd_ vd1	on-off duty cycle duration	Λ	194 4:20:15	R	dd hh:mm:ss
31	vd1 vd2	on duty cycle duration at refrigeration start (set to 0 for previous stop value)		194 4:20:15		dd hh:mm:ss
32	vdd	on duty cycle adaptation speed (low value for slow adaptation and small swinging)	0	255	8	
	vF	Functions about turbo mode (forcing-on the expansion valve)				,
	vF_	runctions about turbo mode (forcing-on the expansion valve)				

Rem. Parameter	Description	Minimum	Maximum	Default Unit
	turbo mode: 0=off / 1=on / 2=auto	0	255	2 /
vFd	turbo mode delay	0	194 4:20:15	30:00 dd hh:mm:ss
	suction pipe overheating for turbo mode activation	0.0	99.0	12.0 K
vFt	· · · · · · · · · · · · · · · · · · ·	0.0	99.0	1.0 K
vb_	Functions about cooling capacity boost (raising a flag for the central unit)	0	255	2 /
vbP vbd	boost mode: 0=off / 1=on / 2=auto boost mode delay	0	255 194 4:20:15	2 / 1:00:00 dd hh:mm:ss
34 vbH	·····	0.0	99.0	0.5 K
vbt	difference between product and set point required for boost mode	0.0	99.0	2.0 K
b	Functions about probe calibration			
b1	Probe nr. 1			
	calibration offset	-9.0	9.0	0.0 K
	use probe to calculate product average temperature	oFF	_on	oFF /
b1S b1L	1 3 1	oFF oFF	_on	_on / on /
b2	Probe nr. 2	011	_on	_011 /
_	calibration offset	-9.0	9.0	0.0 K
b2A	use probe to calculate product average temperature	oFF	_on	_on /
	use probe for safety temperature	oFF	_on	_on /
b2L		oFF	_on	_on /
b3_	Probe nr. 3	0.0	0.0	0.0.1/
	calibration offset use probe to calculate product average temperature	-9.0 oFF	9.0 on	0.0 K oFF /
	use probe to calculate product average temperature use probe for safety temperature	oFF	_on	oFF /
b3L	•	oFF	_on	oFF /
b4_	Probe nr. 4		_	,
	calibration offset	-9.0	9.0	0.0 K
	use probe to calculate product average temperature	oFF	_on	_on /
b4S	, , ,	oFF	_on	_on /
b4L b5	use probe for alarm temperature Probe nr. 5	oFF	_on	_on /
	calibration offset	-9.0	9.0	0.0 %
	use probe to calculate room humidity	oFF	on	_on /
b6	Probe nr. 6			/
<u>b</u> 6C	calibration offset	-9.0	9.0	0.0 10*ppm
	use probe to calculate room ethylene	oFF	_on	oFF /
b7_	Probe nr. 7			
	calibration offset	-9.0	9.0	0.0 bar
b/A b8	use probe to calculate suction pressure Probe nr. 8	oFF	_on	_on /
_	calibration offset	-9.0	9.0	0.0 K
	use probe to calculate product average temperature	oFF	on	on /
b8S	· · · · · · · · · · · · · · · · · · ·	oFF	_ _on	/ _on /
b8L	·	oFF	_on	_on /
b9_	Probe nr. 9			0/
	calibration offset	-9.0	9.0	0.0 %
b 1	use probe to calculate CO2 concentration Functions about probe calibration - auxiliary master 1	oFF	_on	oFF /
b_1 b11	Probe nr. 1			
	calibration offset	-9.0	9.0	0.0 K
11A		oFF	_on	oFF /
115	use probe for safety temperature	oFF	_on	oFF /
11L	· ·	oFF	_on	oFF /
b12	Probe nr. 2	0.0	0.0	0.0.1/
12C 12A	calibration offset use probe to calculate product average temperature	-9.0 oFF	9.0 on	0.0 K oFF /
12A 12S	use probe to calculate product average temperature use probe for safety temperature	oFF	_on	oFF /
12L	, , ,	oFF	on_	oFF /
b13	Probe nr. 3	5. 1	_•	,
	calibration offset	-9.0	9.0	0.0 K
13A	, , , , , , , , , , , , , , , , , , , ,	oFF	_on	oFF /
135	·	oFF	_on	oFF /
13L	·	oFF	_on	oFF /
b14 14 <i>C</i>	Probe nr. 4 calibration offset	-9.0	9.0	0.0 K
14A		oFF	on	oFF /
14S	use probe for safety temperature	oFF	_on	oFF /
14L	• • •	oFF	_on	oFF /
b15	Probe nr. 5			
	calibration offset	-9.0	9.0	0.0 %
	enable probe	oFF	_on	oFF /
b16	Probe nr. 6 calibration offset	-9.0	9.0	0.0 %
16A		oFF	on	oFF /
10/4		0.1	_011	J /

Barn Description Minimum Maximum Default Unit						
17C	Rem.		•	Minimum	Maximum	Default Unit
174				0.0	0.0	0.0.0/
Bill Frobe nr. 8 138C 138C 138A 138A 138A 138C 138A						
a calibration offset -9.0 0.0 k			•	OFF	_on	OFF /
188				-0.0	9.0	0 0 K
185						
18.					_	
D			• •		_	
Probe m. 1					_ `	. ,
21A use probe to calculate product average temperature		b21				
215		21C	calibration offset	-9.0	9.0	0.0 K
21L use probe for alarm temperature 0FF					_on	
Probe mr. 2					_on	•
22C Calibration offset			The state of the s	oFF	_on	oFF /
224				0.0	0.0	0.0.1/
225 use probe for safety temperature						
22L sus probe for alarm temperature 9F 9n 0FF 7 23C 23Istration offset 9.0 9.0 9.0 0.0 K 23S sus probe to calculate product average temperature 0FF 0n 0FF 7 23L sus probe for safety temperature 0FF 0n 0FF 7 23L sus probe for safety temperature 0FF 0n 0FF 7 23L sus probe for safety temperature 0FF 0n 0FF 7 23S sus probe to calculate product average temperature 0FF 0n 0FF 7 24S sus probe to calculate product average temperature 0FF 0n 0FF 7 24S sus probe to calculate product average temperature 0FF 0n 0FF 7 25S Probe nr. 6 7 7 7 7 7 7 7 7 7						
Probe nr. 3			1		_	
23C				Oli	_011	011 /
23A sus probe to calculate product average temperature				-9.0	9.0	0 0 K
235						
23L Use probe for alarm temperature 0FF					_	,
Probe nr. 4 Probe nr. 4 Probe nr. 4 Probe nr. 5 Probe nr. 6 Probe nr. 7 Probe nr. 6 Probe nr. 7 Probe nr. 7 Probe nr. 8 Probe nr. 7 Probe nr. 8 Probe nr. 7 Probe nr. 8			, , ,		_	
24A		b24			_	,
245 use probe for safety temperature oFF	35	24C			9.0	
24L use probe for alarm temperature oFF on oFF / Probe nr. 5 0.0 %		24A			_on	
b25			• • •		_on	
36 25C Calibration offset -9.0 9.0 0.0 % b26			·	oFF	_on	oFF /
25A						
b26	36					
26C calibration offset 9.0 9.0 0.0 %			•	oFF	_on	oFF /
26A Probe n. 7 Probe n. 8 Probe n. 9 Probe n. 9				0.0	0.0	0.0.0/
b27						
27C			·	OFF	_on	OFF /
27A enable probe 28				-9.0	9.0	0.0 %
b28						
37 28C calibration offset 28A use probe to calculate product average temperature oFF on oFF			•	Oll	_011	011 /
28A use probe to calculate product average temperature 0FF	37			-9.0	9.0	0.0 K
285		28A	use probe to calculate product average temperature			
L			· · · · · · · · · · · · · · · · · · ·	oFF		
Temperature alarm 145		28L	use probe for alarm temperature	oFF	on	oFF /
Section Sect		L				
Section Sect		_	Temperature alarm			
Ltd alarm delay CO2 alarm CO3 CO2 alarm CO3 CO						-2.0 °C
CC	39		• •			
CCL low CO2 level alarm set point 0.0 100.0 0.0				0	194 4:20:15	30:00 dd hh:mm:ss
LCH high CO2 level alarm set point 0.0 100.0 100.0 100.0 %				0.0	100.0	0.0.0/
LCd alarm delay						
Lo_ On / stand-by status						
40 Loo actual status: stand-by or on deference of Functions about delays dF Delay from previous stop dF delay from request to activation of OUT-6: heating 0 194 4:20:15 3:00 dd hh:mm:ss I Functions about input-output and machine state (read only) IA Analog inputs IA1 analog input 1 (temperature) -55.0 145.0 -55.0 °C IA2 analog input 2 (temperature) -55.0 145.0 -55.0 °C IA3 analog input 3 (suction temperature) -55.0 145.0 -55.0 °C IA4 analog input 4 (temperature) -55.0 145.0 -55.0 °C IA5 analog input 5 (humidity) 0.0 100.0 0.0 % IA6 analog input 5 (humidity) 0.0 999.0 0.0 10*ppm IA7 analog input 7 (low pressure) 0.0 999.0 0.0 (gauge) bar IA8 analog input 8 (temperature) -55.0 145.0 -55.0 °C 3 IA9 analog input 8 (temperature) -55.0 145.0 -55.0 °C Id Digital input 1 (ethylene hardware safety) 0.0 0.0 0.0 0.0 % Id Digital input 1 (ethylene hardware safety) 0.0 0.0 FF 0.0 0.0 0.0 0.0 0.0 0.0 0.0				U	194 4.20.13	50.00 dd IIII.IIIII:SS
Tunctions about delays Delay from previous stop Delay from previous stop Delay from previous stop Delay from request to activation of OUT-6: heating 0 194 4:20:15 3:00 dd hh:mm:ss Delay from request to activation of OUT-6: heating 0 194 4:20:15 3:00 dd hh:mm:ss Delay from request to activation of OUT-6: heating Delay from request to activate Delay from request to activate Delay from request Del	40			oFF	On	oFF /
dF_ Delay from previous stop dF6 delay from request to activation of OUT-6: heating 0 194 4:20:15 3:00 dd hh:mm:ss I_ Functions about input-output and machine state (read only) IA Analog inputs IA1 analog input 1 (temperature) -55.0 145.0 -55.0 °C IA2 analog input 2 (temperature) -55.0 145.0 -55.0 °C IA3 analog input 3 (suction temperature) -55.0 145.0 -55.0 °C IA4 analog input 4 (temperature) -55.0 145.0 -55.0 °C IA5 analog input 5 (humidity) 0.0 100.0 0.0 % IA6 analog input 6 (ethylene) 0.0 999.0 0.0 10*ppm IA7 analog input 7 (low pressure) 0.0 999.0 0.0 (gauge) bar IA8 analog input 8 (temperature) -55.0 145.0 -55.0 °C 3 IA9 analog input 8 (temperature) -55.0 145.0 -55.0 °C 3 IA9 analog input 9 (CO2) 0.0 100.0 0.0 % Id_ Digital input Id1 digital input 1 (ethylene hardware safety) oFF _on oFF / Id2 digital input 2 (evaporator hardware safety) oFF _on oFF / Id3 digital input 4 (unused) oFF _on oFF /	70		J	Oil	_011	
Temperature						
I Functions about input-output and machine state (read only) Analog inputs IA1 analog input 1 (temperature) -55.0 145.0 -55.0 °C IA2 analog input 2 (temperature) -55.0 145.0 -55.0 °C IA3 analog input 3 (suction temperature) -55.0 145.0 -55.0 °C IA4 analog input 4 (temperature) -55.0 145.0 -55.0 °C IA5 analog input 5 (humidity) 0.0 100.0 0.0 % IA6 analog input 6 (ethylene) 0.0 999.0 0.0 10*ppm IA7 analog input 7 (low pressure) 0.0 999.0 0.0 (gauge) bar IA8 analog input 8 (temperature) -55.0 145.0 -55.0 °C 3 IA9 analog input 9 (CO2) 0.0 100.0 0.0 % Id_ Digital input Id1 digital input 1 (ethylene hardware safety) oFF _on oFF / Id3 digital input 3 (heating hardware safety) oFF _on oFF / Id4 digital input 4 (unused) oFF _on oFF /				0	194 4:20:15	3:00 dd hh:mm:ss
IA		I				
IA1						
IA3			analog input 1 (temperature)			
IA4						
IA5						
IA6						
IA7 analog input 7 (low pressure) IA8 analog input 8 (temperature) 3 IA9 analog input 9 (CO2) Id_ Digital input Id1 digital input 1 (ethylene hardware safety) Id2 digital input 2 (evaporator hardware safety) Id3 digital input 3 (heating hardware safety) Id4 digital input 4 (unused) O.0 999.0 0.0 (gauge) bar 145.0 -55.0 °C 0.0 100.0 0.0 % F on oFF / OFF on oFF /						
IA8 analog input 8 (temperature) -55.0 145.0 -55.0 °C 3 IA9 analog input 9 (CO2) 0.0 100.0 0.0 % Id_ Digital input Id1 digital input 1 (ethylene hardware safety) oFF on oFF / Id2 digital input 2 (evaporator hardware safety) oFF on oFF / Id3 digital input 3 (heating hardware safety) oFF on oFF / Id4 digital input 4 (unused) oFF on oFF /						
3 IA9 analog input 9 (CO2) Id_ Digital input Id1 digital input 1 (ethylene hardware safety) Id2 digital input 2 (evaporator hardware safety) Id3 digital input 3 (heating hardware safety) Id4 digital input 4 (unused) OFF OFF OFF OFF OFF OFF OFF OFF OFF OF						
Id_ Digital input Id1 digital input 1 (ethylene hardware safety) oFFonoFF / Id2 digital input 2 (evaporator hardware safety) oFFonoFF / Id3 digital input 3 (heating hardware safety) oFFonoFF / Id4 digital input 4 (unused) oFFonoFF /	2					
Id1 digital input 1 (ethylene hardware safety) oFF _ on oFF / Id2 digital input 2 (evaporator hardware safety) oFF _ on oFF / Id3 digital input 3 (heating hardware safety) oFF _ on oFF / Id4 digital input 4 (unused) oFF _ on oFF /	3			0.0	100.0	0.0 /0
Id2 digital input 2 (evaporator hardware safety) oFF on oFF / Id3 digital input 3 (heating hardware safety) oFF on oFF / Id4 digital input 4 (unused) oFF on oFF /		_		oFE.	on	oFF /
Id3 digital input 3 (heating hardware safety) oFFon oFF / Id4 digital input 4 (unused) oFFon oFF /					_	
ld4 digital input 4 (unused) oFFon oFF /						
					_	
_ '					_	
					_	

OAJ analog output "FAN" 0 255 0 0	Rem.	Parameter OA	Description Analog output	Minimum	Maximum	Default Unit
OA2 analog output "I loat" O		_		0	255	0 /
Odd			o i			
Odd digital output 2 (crimpration solenoid) Odd digital output 2 (crimpration solenoid) Odd				· ·	233	0 /
Odd digital output 2 (steam producer)				oFF	on	oFF /
Odd digital output 3 (air remew)					_	•
Odd digital output 5 (etw)pensor)					_	•
Odd digital output 5 (evaporator)					_	
Odd digital output 6 (heating)					_	
Odd alarm - eventually connected to relay nr. 2 oFF						•
Odd			· (•,		_	· .
Machine status						
Idic door fully closed ofF			•		_	,
Idade Goor Fully closed GoFF On OFF OF		Ido	door fully open	oFF	on	oFF /
Idh door safety door is presumed to be closed, combining history of door closure and safety oFF on oFF / bit7 bit100 Bit8 is pressed oFF on oFF / bit7 bit100 Bit8 pressed oFF on oFF / of oFF on oFF / o		ldc	· · ·		_	•
187 button Bi is pressed oFF on oFF /		ldh	door safety	oFF	on	oFF /
Bir Button Bir is pressed GFF Gn G		IdP	door is presumed to be closed, combining history of door closure and safety	oFF	on	oFF /
In safety of depressure fan 2		lb7	button B8 is pressed	oFF		oFF /
In Safety of depressure fan 2		lb8	button B7 is pressed	oFF	on	oFF /
So		ln1	safety of depressure fan 1	oFF	on	oFF /
OSD actual set point .55.0 .75		In2		oFF	_	oFF /
OSD actual set point .55.0 .75		In3	safety of depressure fan 3	oFF	on	oFF /
OS2 refrigerant saturation temperature corresponding to the low pressure .990 0 990 0 0 0 0 0 0		OS0	actual set point	-55.0	145.0	
OS3 refirement overheating at the exaporator outlet		OS1	low pressure (LP)	0.0	999.0	0.0 (gauge) bar
OS4 product average temperature OS5 product temperature andard deviation OS6 air average temperature OS7 air temperature standard deviation OS8 product descent ramp, per hour OS8 product descent ramp, per hour OS9 tetylene status □0 product product per device per device product per device product per device per device product per device per device product per device per d		OS2		-55.0	145.0	-55.0 °C
OSS product temperature standard deviation OS os air average temperature -5.50 145 0 -55.0 ° C os air average temperature -5.50 145 0 -55.0 ° C os air average temperature -5.50 145 0 -55.0 ° C os air average temperature -5.50 145 0 -55.0 ° C os air average temperature -5.50 145 0 -55.0 ° C os air temperature standard deviation -990 0 990 0 -999.0 K -990.0 K -990.0 K -990.0 K -990.0 K -909.0 K -909.0 K -909.0 K		OS3	refrigerant overheating at the evaporator outlet		999.0	
OS6 air average temperature .55.0 .145.0 .55.0 .057		OS4	product average temperature	-55.0	145.0	-55.0 °C
OS7 air temperature standard deviation 0.0 999.0 999.0 No.			·	0.0	999.0	
OSS product descent ramp, per hour OSS ripening status: Deaff 1-lemimediate delay 2=t1 3=t2 4=t3 5=t4 6=t5 Death OSS OSS OSS ripening timer (in countdown-mode) OSS ethylene status: O=tf 1-lemimediate delay 2=waiting for temperature 3=first on OSS		OS6	air average temperature	-55.0	145.0	-55.0 °C
OSr ripening status: 0=0ff / 1=immediate delay / 2=t1 / 3=t2 / 4=t3 / 5=t4 / 6=t5 0 255 0 / the open status: 0=0ff / 1=immediate delay / 2=waiting for temperature / 3=first on / 4=first over / 5=following on / 6=following pause / 7=ended / 8=forced 0 194 4:20:15 0 0 0 0 0 0 0 0 0		OS7	air temperature standard deviation	0.0	999.0	-999.0 K
OSt chylene status: 0=0ff 1=immediate delay 2=waiting for temperature 3=first on 0 255 0	34	OS8	product descent ramp, per hour	-999.0	999.0	-999.0 K
OSY ethylene status: 0=off / 1=immediate delay / 2=waiting for temperature / 3=first on / 4=first ower / 5=following on / 0=following pause / 7=ended / 8=forced 0 194 4:20:15 0 0 0 0 0 0 0 0 0		OSr	ripening status: 0=off / 1=immediate delay / 2=t1 / 3=t2 / 4=t3 / 5=t4 / 6=t5	0	255	0 /
A=first over / 5=following on / 6=following pause / 7=ended / 8=forced				0	194 4:20:15	0 dd hh:mm:ss
OSU		OSY	ethylene status: 0=off / 1=immediate delay / 2=waiting for temperature / 3=first on	0	255	0 /
On			/ 4=first over / 5=following on / 6=following pause / 7=ended / 8=forced			
OSb ripening air renew status: 0=off / 1=waiting for ethylene / 2=first pause / 3=on / 4=pause / 5=ended / 6=forced OSv Foreign air renew timer (in countdown-mode) O 194 4:20:15 O dd hh:mm:ss OSA OSS						
A=pause / 5=ended / 6=forced OSv ripening air renew timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss ONA remaining air-renew-cycles, including the one eventually running 0 255 0 / OSX storage air renew tatus: 0=off / 1=immediate delay / 2=on / 3=pause / 4=forced 0 255 0 / OSX storage air renew timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSS defrost status: 1=normal / 2=defr / 3=drip / 4=fan delay / 5=forced / 6=wait 0 255 0 / OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0		
OSV ripening air renew timer (in countdown-mode) OnA remaining air-renew-cycles, including the one eventually running OSA storage air renew status: 0=off / 1=immediate delay / 2=on / 3=pause / 4=forced OSA storage air renew tatus: 0=off / 1=immediate delay / 2=on / 3=pause / 4=forced OSA storage air renew tatus: 0=off / 1=immediate delay / 5=forced / 6=wait OSS defrost status: 1=anomal / 2=defr / 3=drip / 4=fan delay / 5=forced / 6=wait OSS defrost status: 1=anomal / 2=defr / 3=drip / 4=fan delay / 5=forced / 6=wait OSS auxiliary master is tatus: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 1 status: 0=off / 0=ok /		OSb		0	255	0 /
OnA remaining air-renew-cycles, including the one eventually running 0 255 0 / OSA storage air renew status: 0=off / 1=immediate delay / 2=on / 3=pause / 4=forced 0 255 0 / OSX storage air renew timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSS defrost status: 1=normal / 2=defr / 3=drip / 4=fan delay / 5=forced / 6=wait 0 255 0 / OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSB auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lo						
OSA storage air renew status: 0=off / 1=immediate delay / 2=on / 3=pause / 4=forced 0 255 0 / 194 4:20:15 0 dd hh:mm:ss OSS storage air renew timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSF defrost timer (in countdown-mode) 0 194 4:20:15 0 dd hh:mm:ss OSB auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:15) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:15) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:15) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:15) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:15) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:16) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:16) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / 194 (20:16) OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 5F 0 or 0FF / 00 0FF 0 or 0FF / 00 0			, ,			
OSX storage air renew timer (in countdown-mode) OSS defrost status: 1=normal / 2=defr / 3=drip / 4=fan delay / 5=forced / 6=wait OSS defrost timer (in countdown-mode) OSS defrost timer (in countdown-mode) OSS dauxilliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS auxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSS dauxilliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OFF on ofFF on ofFF / 0 ofFF on of						,
OSS defrost status: 1=normal / 2=defr / 3=drip / 4=fan delay / 5=forced / 6=wait O 255 O defrost timer (in countdown-mode) O 194 4:20:15 O dd hh:mm:ss OSd auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost O 255 O OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost O 255 O OSE						,
OSF defrost timer (in countdown-mode) OSF auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost O CFF on OFF / OFF on			- ,			
OSd auxiliary master 1 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0 255 0 / OLA actual alarm - read only (0 means no alarm) 0 255 0 / OSn evaporator fan stopped by door opening or manual control oFF on oFF / Odd door is opening oFF on oFF / Odd door is closing oFF on oFF / OdL room lighting oFF on oFF / OdL room lighting oFF on oFF / Ocr curtain is unrolling oFF on oFF / Ocr curtain is rolling oFF on oFF / On1 depressure fan 1 oFF on oFF / On2 depressure fan 2 oFF on oFF / On3 depressure fan 3 oFF on oFF / On4 refrigeration is required but not working oFF on oFF / On1 speed regulation of depressure fan 1 o 255 o / O12 speed regulation of depressure fan 3 o 255 o / ON liquid refrigerant required from the central unit						•
OSE auxiliary master 2 status: 0=off / 1=ok / 2=check / 3=reconnect / 4=none / 5=lost 0						
LLA actual alarm - read only (0 means no alarm) OSn evaporator fan stopped by door opening or manual control OFF on OFF on OFF Odd door is opening Odd door is opening OdF oor is opening OHF on OFF on OFF ODF ODF ODF ODF ODF ODF ODF ODF ODF				-		
OSn evaporator fan stopped by door opening or manual control Odo door is opening Odc door is closing OFF on OFF on OFF OFF OFF OFF OFF OFF OFF OFF OFF OF						
Odo door is opening Odc door is closing Odc door light is flashing OfF on oFF / OdL or om lighting Ocu curtain is unrolling Ocu curtain is unrolling Ocr curtain is rolling Ocr o						
Odc door is closing OdF door light is flashing OdL room lighting Ocu curtain is unrolling Ocu curtain is unrolling Ocu curtain is unrolling Ocu curtain is rolling Ocu curtain is unrolling Ocu curtain is rolling Ocu curtain is unrolling Ocu ocu curtain is unrolling Ocu ocu ocu curtain is rolling Ocu o					_	
OdF door light is flashing OdL room lighting Occ curtain is unrolling Occ curtain is unrolling Occ curtain is rolling Occ curtain is rolling OFF On O					_	· .
OdL room lighting Ocu curtain is unrolling Ocr curtain is rolling Ocr curtain is rolling OfF on oFF					_	•
Ocu curtain is unfolling Ocr curtain is rolling Ocr curtain is rolling Ocr curtain is rolling Ocr curtain is rolling Off off on off off off On1 depressure fan 1 On2 depressure fan 2 On3 depressure fan 3 OFF on off off On0 refrigeration is required but not working Off off on off off Other off off Off off off Other off off Off off off Other off					_	
Ocr curtain is rolling On1 depressure fan 1 On2 depressure fan 2 On3 depressure fan 3 On6 refrigeration is required but not working On7 refrigeration is required but not working On8 speed regulation of depressure fan 1 On9 speed regulation of depressure fan 1 On9 speed regulation of depressure fan 2 On9 liquid refrigerant required from the central unit ON0 liquid refrigerant required from the central unit ON1 speed regulation of depressure fan 3 ON1 liquid refrigerant required from the central unit ON2 SPEED ON OFF ON ON OFF ON					_	
On1 depressure fan 1 On2 depressure fan 2 On3 depressure fan 3 On5 depressure fan 3 On6 refrigeration is required but not working On7 speed regulation of depressure fan 1 On8 speed regulation of depressure fan 1 On9 speed regulation of depressure fan 2 On9 speed regulation of depressure fan 2 On9 liquid refrigerant required from the central unit On9 liquid refrigerant required from the central unit On9 loost mode On9 boost mode ON9 Functions about ripening quality during previous cycle OU1 ripening serial number OU2 ripening duration in hours, summing from d1 to d4 OU3 final product quality - ripening input OV2 Functions about ripening quality during actual cycle			•		_	
On2 depressure fan 2 On3 depressure fan 3 OFF On OFF OFF ON OFF OFF ON OFF OFF ON OFF OFF			·		_	•
On3 depressure fan 3 On0 refrigeration is required but not working On0 refrigeration is required but not working Off on off off on off off on off off on off off					_	· .
On0 refrigeration is required but not working Ot1 speed regulation of depressure fan 1 Ot2 speed regulation of depressure fan 2 Ot3 speed regulation of depressure fan 2 Ot3 speed regulation of depressure fan 3 Ot5 speed regulation of depressure fan 3 Ot5 speed regulation of depressure fan 3 Ot5 speed regulation of depressure fan 3 Ot7 speed regulation of depressure fan 2 Ot7 speed regulation of depressure fan 1 Ot7 speed regulation of depressure fan 2 Ot7 speed regulation of depressu						
Ot1 speed regulation of depressure fan 1 Ot2 speed regulation of depressure fan 2 Ot3 speed regulation of depressure fan 2 Ot3 speed regulation of depressure fan 3 Ot5 speed regulation of depressure fan 2 Ot5 speed regulation of depressure fan 2 Ot7 speed regulation of depressure fan 3 Ot7 speed regulation of speed			·		_	
Ot2 speed regulation of depressure fan 2 Ot3 speed regulation of depressure fan 3 Ot5 speed regulation of depressure fan 2 Ot7 speed regulation of depressure fan 2 Ot7 speed regulation of depressure fan 2 Ot7 speed regulation of depressure fan 3 Ot7 speed regulation of speed			- · · · · · · · · · · · · · · · · · · ·			
Ot3 speed regulation of depressure fan 3 Onv liquid refrigerant required from the central unit OFF On ON OFF ON						,
Onv liquid refrigerant required from the central unit OFF ONH hot gas required from the central unit OFF ONF turbo mode OFF ONF ONF ONF ONF ONF ONF ONF ONF ONF						
OnH hot gas required from the central unit OFF on oFF on oFF ONF turbo mode ORF on oFF on oFF ONF ONF ONF ONF ONF ONF ONF ONF ONF O			· · ·			
OnF turbo mode OnF turbo mode OnB boost mode OnB boost mode OnB boost mode OnB conB conB conB conB conB conB conB co					_	•
Onb boost mode OU_ Functions about ripening quality during previous cycle OU_ ripening serial number OU ripening duration in hours, summing from _d1 to _d4 OUI initial product quality - ripening input OUO final product quality - ripening output OUU ripening process quality OU_ Functions about ripening quality during actual cycle			- ,		_	
OU_ Functions about ripening quality during previous cycle OUn ripening serial number 0 65535 0 / OUd ripening duration in hours, summing from _d1 to _d4 0 255 0 / OUI initial product quality - ripening input 0 100 0 / OUO final product quality - ripening output 0 100 0 / OUU ripening process quality 0 100 0 / OV_ Functions about ripening quality during actual cycle					_	
OUn ripening serial number 0 65535 0 / OUd ripening duration in hours, summing from _d1 to _d4 0 255 0 / OUI initial product quality - ripening input 0 100 0 / OUO final product quality - ripening output 0 100 0 / OUU ripening process quality 0 100 0 / OV_ Functions about ripening quality during actual cycle				OF I	_011	011 /
OUd ripening duration in hours, summing from _d1 to _d4				0	65535	0 /
OUI initial product quality - ripening input OUO final product quality - ripening output OUU ripening process quality Ov_ Functions about ripening quality during actual cycle						
OUO final product quality - ripening output OUU ripening process quality Ov_ Functions about ripening quality during actual cycle						
OUU ripening process quality 0 100 0 / Ov_ Functions about ripening quality during actual cycle						• .
Ov_ Functions about ripening quality during actual cycle						•
				- 0	100	• /
		_		0	255	0 /
		-	, , , , , , , , , , , , , , , , , , , ,			,

Rem. Parameter Description Minimum Maximum Oxfout Unit Oxfout						
Ov. of inal product quality - riponing protest quality : figuring protest quality : figuring process quality : figuring : f	Rem.			Minimum		
Out of peoing process quality				_		
IAA Analog inputs compression						
Mail Manage input 1 (temperature)				0	100	0 /
M2				FF 0	145.0	FF 0 0C
Max			- ' ' '			
MA Na Nandig injust 5 (percentage of sensor range)						
Main						
Apr						
Ar analog input R (incremature)			- · · · · · · · · · · · · · · · · ·			
National Content National Co						
Digital input 1			0 . (. 0)			
Mil. digital input 1 OFF				-55.0	145.0	-55.0 °C
Mathematical Math				- 55		- CC /
Id3 digital input 4						
Id4 digital input 4 OFF			• .			,
IdS digital input 5					_	,
OAA analog output "FAN"			- ·			•
OA1 analog output "FAN" O 255 O / OLD				OFF	_on	orr /
OA2 analog output "l out" O 255 O				0	255	0 /
Old Digital output 1						
Odd digital output 1				U	255	0 /
Odd digital output 2 oFF _on oFF / Odd digital output 3 oFF _on oFF / Odd digital output 5 oFF _on oFF / Odd digital output 5 oFF _on oFF / Odd digital output 4 oFF _on oFF / Odd digital output 5 oFF _on oFF / IA2 analog input 1 (temperature) _55.0 145.0 _55.0 °C IA3 analog input 2 (temperature) _55.0 145.0 _55.0 °C IA4 analog input 3 (temperature) _55.0 145.0 _55.0 °C IA5 analog input 5 (percentage of sensor range)						FF /
Odd digital output 3		Odi	digital output 1		_	
Odd digital output 4					_	
Odd digital output 5						
Odd digital output 6 Analog input 1 (temperature) .55.0 .55.					_	
Part Analog inputs - auxiliary master 2 IA1 analog input 1 (temperature) .55.0 145.0 .55.0 °C IA2 analog input 2 (temperature) .55.0 145.0 .55.0 °C IA3 analog input 3 (temperature) .55.0 IA5.0 .55.0 °C IA3 analog input 4 (temperature) .55.0 IA5.0 .55.0 °C IA3 analog input 4 (temperature) .55.0 IA5.0 .55.0 °C IA3 analog input 5 (percentage of sensor range) .0.0 .0.0 .0.0 % IA3 analog input 6 (percentage of sensor range) .0.0 .0.0 .0.0 % IA3 analog input 7 (percentage of sensor range) .0.0 .0.0 .0.0 % IA3 analog input 8 (temperature) .55.0 IA5.0 .55.0 °C IA5.0 IA5.0 .55.0 °C IA5.0 I						
IA1 analog input 1 (temperature) .55.0 145.0 .55.0 °C IA2 analog input 2 (temperature) .55.0 145.0 .55.0 °C IA3 analog input 3 (temperature) .55.0 145.0 .55.0 °C IA4 analog input 4 (temperature) .55.0 145.0 .55.0 °C IA5 analog input 5 (percentage of sensor range) .0.0 .00.0 .00.0 .00.0 % IA6 analog input 6 (percentage of sensor range) .0.0 .00.0 .00.0 % IA7 analog input 7 (percentage of sensor range) .0.0 .00.0 .00.0 % IA8 analog input 7 (percentage of sensor range) .0.0 .00.0 .00.0 % IA8 analog input 8 (temperature) .55.0 .55.0 °C I2d Digital input 1 .55.0 °C I2d Digital input 2 .55.0 °C .55.0 °C I4d digital input 2 .55.0 °C .55.0 °C I4d digital input 3 .55.0 °C .55.0 °C I4d digital input 4 .57.0 °C .57.0 °C .57.0 °C I4d digital input 4 .57.0 °C .				oFF	_on	OFF /
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1A8						
12d Digital input Digital input Description Desc						
Id1 digital input 1 OFF				-55.0	145.0	-55.0 °C
Id2 digital input 2 OFF						
Id3 digital input 3 OFF						
Id4 digital input 4 OFF					_	
Id5 digital input 5 O2A Analog output FAN" O 255 O O O24 OA2 OA2 OA2 OA2 OA2 OA3			- ·		_on	
O2A Analog output FAN"					_on	,
OA1 analog output "FAN" O 255 O OA2 analog output "I out" O 255 O O2d Digital output Od1 digital output 1 Od2 digital output 2 OFF ON OFF Od3 digital output 3 OFF ON OFF Od4 digital output 4 OFF ON OFF Od5 digital output 5 OFF ON OFF Od6 digital output 5 OFF ON OFF Od6 digital output 5 OFF ON OFF E_			• .	oFF	_on	oFF /
OA2 analog output "I out" 0 255 0 / O2d Digital output 1 Od1 digital output 1 OFF ON O						
O2d Digital output Od1 digital output 1 Od2 digital output 2 OFF ON OFF		OA1	analog output "FAN"	0	255	0 /
Od1 digital output 1 Od2 digital output 2 OFF ON OFF ON OFF OFF ON OFF ON OFF OFF			• .	0	255	0 /
Od2 digital output 2 OFF						
Od3 digital output 3 Od4 digital output 4 Od5 digital output 5 Od6 digital output 5 Od6 digital output 5 Od6 digital output 6 Functions about slave preferences Functions about slave preferences Ed Functions about display Ed5 slave address for local network communication EY Functions about display EYY input to show on display: 0=average temperature / 1=AN1 / 2=AN2 / EY subject of the first					_	
Od4 digital output 4 Od5 digital output 5 Od6 digital output 6 Functions about slave preferences Ed Functions about network address EdS slave address for local network communication EY Functions about display EYY input to show on display: 0=average temperature / 1=AN1 / 2=AN2 / EYS value set by shortcut, during ripening: 0 = t0 / 1 = t1 / / 5 = t5 / 6 = current Ed duration of label display rotation, when EYr=2 (repeated for each parameter) E1 duration of value display during rotation E1 duration of value display during rotation E2 Functions about display during rotation E2 duration of value display during rotation E3 duration of value display during rotation E4 duration of value display during rotation E5 duration of value display during rotation E6 duration of value display during rotation E7 value					_on	
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Ed			9 1	oFF	_on	oFF /
EdS slave address for local network communication EY Functions about display EYY input to show on display: 0=average temperature / 1=AN1 / 2=AN2 / EYS value set by shortcut, during ripening: 0=_t0 / 1=_t1 / / 5=_t5 / 6=current EYr enable display rotation: 0=off / 1=all / 2=selected EYr enable display rotation: 0=off / 1=all / 2=selected EO Functions about display rotation, when EYr=1 EOd duration of label display during rotation EOE duration of value display during rotation EOE duration of value display during rotation EI functions about display rotation, when EYr=2 (repeated for each parameter) EId duration of label display during rotation EIt label text during rotation EIE duration of value display during rotation EIE duration of value display during rotation EIE duration of value display during rotation EIE duration of label display during rotation EIE duration of label display during rotation EIE duration of value display rotation, when EYr=2 (repeated for each parameter) EIE duration of label display during rotation EIE duration of value display during rotation EIE duration of value display during rotation EIE duration of value display during rotation EIE duration of label display during rotation EIE duration of label display during rotation EIE duration of value display during rotation EIE duration of value display during rotation EIE duration of label display during rotation		E	·			
EY_ Functions about display EYY input to show on display: 0=average temperature / 1=AN1 / 2=AN2 / 0 255 0 / EYS value set by shortcut, during ripening: 0=_t0 / 1=_t1 / / 5=_t5 / 6=current 0 6 6 / EYr enable display rotation: 0=off / 1=all / 2=selected 0 2 0 / EO_ Functions about display rotation, when EYr=1 EOd duration of label display during rotation 0 255 1 / EOE duration of value display during rotation 0 255 2 / E1_ Functions about display rotation, when EYr=2 (repeated for each parameter) E1d duration of label display during rotation 0 255 1 / E1t label text during rotation 000 yyy rM= / E1e duration of value display during rotation 000 yyy rM= / E1E duration of value display during rotation 000 yyy rM= / E2_ Functions about display rotation, when EYr=2 (repeated for each parameter) E2d duration of label display during rotation 0 255 1 / E2t label text during rotation 000 yyy X1= / E2t label text during rotation 000 yyy X1= / E2t label text during rotation 000 255 4 / E3_ Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation 0 255 1 / E3 Functions about display rotation, when EYr=2 (repeated for each parameter)						
EYY input to show on display: 0=average temperature / 1=AN1 / 2=AN2 / 0 255 0 / EYS value set by shortcut, during ripening: 0=_t0 / 1=_t1 / / 5=_t5 / 6=current 0 6 6 / EYr enable display rotation: 0=off / 1=all / 2=selected 0 2 0 / E0_ Functions about display rotation, when EYr=1 E0d duration of label display during rotation 0 255 1 / E0E duration of value display during rotation 0 255 2 / E1 Functions about display rotation, when EYr=2 (repeated for each parameter) E1d duration of label display during rotation 0 255 1 / E1t label text during rotation 000 yyy rM= / E1e duration of value display during rotation 0 255 4 / E2 Functions about display rotation, when EYr=2 (repeated for each parameter) E2d duration of label display during rotation 0 255 1 / E2t label text during rotation 000 yyy X1= / E2t label text during rotation 000 yyy X1= / E2t label text during rotation 000 yyy X1= / E2t label text during rotation 000 yyy X1= / E2t label text during rotation 000 yyy X1= / E3c functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation 0 255 1 /				1	254	1 /
EYS value set by shortcut, during ripening: 0 = t0 / 1 = t1 / / 5 = t5 / 6 = current 0 6 6 / EYr enable display rotation: 0 = off / 1 = all / 2 = selected 0 2 0 / EO Functions about display rotation, when EYr=1 E0d duration of label display during rotation 0 255 1 / E0E duration of value display during rotation 0 255 2 / EI Functions about display rotation, when EYr=2 (repeated for each parameter) E1d duration of label display during rotation 0 255 1 / E1 label text during rotation 0 255 4 / E2 Functions about display during rotation 0 255 4 / E2 Functions about display rotation, when EYr=2 (repeated for each parameter) E2d duration of value display during rotation 0 255 1 / E2t label text during rotation 0 255 1 / E2t label text during rotation 0 255 1 / E2t label text during rotation 0 255 4 / E2 Functions about display during rotation 0 255 4 / E2 Functions about display during rotation 0 255 4 / E3 Functions about display during rotation 0 255 4 / E3 Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation 0 255 1 / E3 Functions about display rotation, when EYr=2 (repeated for each parameter)						
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E1t label text during rotation 000 yyy rM= / E1E duration of value display during rotation 0 255 4 / E2_ Functions about display rotation, when EYr=2 (repeated for each parameter) E2d duration of label display during rotation 0 255 1 / E2t label text during rotation 000 yyy X1= / E2E duration of value display during rotation 0 255 4 / E3_ Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation 0 255 1 /			, , , , , , , , , , , , , , , , ,			
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E1E duration of value display during rotation E2_ Functions about display rotation, when EYr=2 (repeated for each parameter) E2d duration of label display during rotation E2t label text during rotation E2t duration of value display during rotation E2E duration of value display during rotation E3_ Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation O 255 4 / E3_ Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation O 255 1 /		E1t		000	ууу	rM= /
E2d duration of label display during rotation 0 255 1 / E2t label text during rotation 000 yyy X1= / E2E duration of value display during rotation 0 255 4 / E3_ Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation 0 255 1 /				0		4 /
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E2E duration of value display during rotation 0 255 4 / E3_ Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation 0 255 1 /		E2t	label text during rotation	000	ууу	
E3_ Functions about display rotation, when EYr=2 (repeated for each parameter) E3d duration of label display during rotation 0 255 1 /		E2E	duration of value display during rotation	0		4 /
			Functions about display rotation, when EYr=2 (repeated for each parameter)			
				0	255	
,			· • •		ууу	

Rem. Paramete	r Description	Minimum	Maximum	Default Unit
E3E	·	0	255	0 /
E4	Functions about display rotation, when EYr=2 (repeated for each parameter)			- /
E4d		0	255	1 /
E4t	label text during rotation	000	ууу	X2= /
E4E	duration of value display during rotation	0	255	4 /
E5_	Functions about display rotation, when EYr=2 (repeated for each parameter)			
E5d	duration of label display during rotation	0	255	1 /
E5t	•	000	ууу	rH= /
E5E	1 3 0	0	255	4 /
E6_	Functions about display rotation, when EYr=2 (repeated for each parameter)			
E6d		0	255	1 /
E6t		000	ууу	Et= /
E6E	1 3 0	0	255	0 /
E7	Functions about display rotation, when EYr=2 (repeated for each parameter)			_ ,
E7d		0	255	1 /
E7t	label text during rotation	000	ууу	LP= /
E7E	1 3 0	0	255	0 /
E8	Functions about display rotation, when EYr=2 (repeated for each parameter)	^	055	
E8d		0	255	1 /
E8t	label text during rotation	000	ууу	X3= /
E8E	. , .	0	255	0 /
E8p	Functions about display rotation, when EYr=2 (repeated for each parameter)	^	٥٦٦	1 /
E8d		0	255	1 /
E8t	label text during rotation	000	ууу	c2= /
E8E	1 3 0	0	255	0 /
E9_	Functions about display rotation, when EYr=2 (repeated for each parameter)	0	255	1 /
E9d E9t	1 7 0	000	255	1 /
E9E	label text during rotation duration of value display during rotation	000	ууу 255	_t= /
	Functions about display rotation, when EYr=2 (repeated for each parameter)	U	255	4 /
F0_ F0d	, , , , , , , , , , , , , , , ,	0	255	1 /
F0t	label text during rotation	000		LP= /
F0E	*	000	ууу 255	0 /
F1	Functions about display rotation, when EYr=2 (repeated for each parameter)	U	233	0 /
F1d	duration of label display during rotation	0	255	1 /
F1t		000	ууу	Lt= /
F1E	9	0	255	0 /
F2	Functions about display rotation, when EYr=2 (repeated for each parameter)	· ·	233	0 /
F2d	duration of label display during rotation	0	255	1 /
F2t	label text during rotation	000	ууу	oh= /
F2E		0	255	0 /
F3	Functions about display rotation, when EYr=2 (repeated for each parameter)	-		- /
F3d		0	255	1 /
F3t	label text during rotation	000	ууу	Av= /
F3E	*	0	255	4 /
F4	Functions about display rotation, when EYr=2 (repeated for each parameter)			/
F4d	duration of label display during rotation	0	255	1 /
F4t	label text during rotation	000	ууу	vr= /
F4E	•	0	255	0 /
		U		,
F5	Functions about display rotation, when EYr=2 (repeated for each parameter)	0		
F5_ F5d	1 3 0	0	255	1 /
	Functions about display rotation, when EYr=2 (repeated for each parameter)		255 ууу	1 / AA= /
F5d	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation	0		
F5d F5t	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation	0 000	ууу	AA= /
F5d F5t F5E	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation	0 000	ууу	AA= /
F5d F5t F5E F6_	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter)	0 000 0	ууу 255	AA= / 0 /
F5d F5t F5E F6_ F6d	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation	0 000 0	ууу 255 255	AA= / 0 / 1 /
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F5d F5t F5E F6_ F6d F6t F6E	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation	0 000 0 0 0 000 0	ууу 255 255 ууу	AA= / 0 / 1 / vA= / 0 / 1 /
F5d F5t F5E F6_ F6d F6t F6E F7_ F7d F7t	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation	0 000 0 0 0 000 0	ууу 255 255 ууу 255 255 ууу	AA= / 0 / 1 / vA= / 0 /
F5d F5t F5E F6_ F6d F6t F6E F7_ F7d	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation	0 000 0 0 0 000 0	255 255 255 255 255 255	AA= / 0 / 1 / vA= / 0 / 1 /
F5d F5t F5E F6_ F6d F6E F7_ F7d F7t F7E Eb_	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation label text during rotation duration of value display during rotation label text during rotation functions about buzzer	0 000 0 0 0 000 0	ууу 255 255 ууу 255 255 ууу	AA= / 0 / 1 / vA= / 0 / 1 / MP= / 0 /
F5d F5t F5E F6_ F6d F6t F7_ F7d F7t F7E	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation duration of value display during rotation Functions about buzzer enable buzzer	0 000 0 0 0 000 0	ууу 255 255 ууу 255 255 ууу	AA= / 0 / 1 / vA= / 0 / 1 / MP= /
F5d F5t F5E F6_ F6d F6t F7_ F7d F7t F7E Eb_ EbH	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation label text during rotation duration of value display during rotation functions about buzzer enable buzzer Functions about keyboard	0 000 0 0 0 000 0	255 255 255 255 255 255 255 255 255	AA= / 0 / 1 / vA= / 0 / MP= / 0 / 1 /
F5d F5t F5E F6_ F6d F6t F7_ F7d F7t F7t Eb_ EbH	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation duration of value display during rotation Functions about buzzer enable buzzer	0 000 0 0 0 000 0	255 255 255 255 255 255 255 255	AA= / 0 / 1 / vA= / 0 / 1 / MP= / 0 /
F5d F5t F5E F6_ F6d F6t F7_ F7d F7t F7t Eb_ EbH	Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation duration of value display during rotation Functions about display rotation, when EYr=2 (repeated for each parameter) duration of label display during rotation label text during rotation label text during rotation duration of value display during rotation functions about buzzer enable buzzer Functions about keyboard	0 000 0 0 0 000 0	255 255 255 255 255 255 255 255 255	AA= / 0 / 1 / vA= / 0 / MP= / 0 / 1 /

2 Parameter remarks

doc H411V5

- Nr Remark
 - During off-time counters continue to count and output is disabled. At reset command they stop and their value is reset. They are restarted by on command. The minus sign on display ("-") means that you already reset timers.
- The period of each cycle includes on-time + off-time, that is the overall duration of the cycle. 2
- In percentage over the sensor range
- Defrost is not performed twice in case safety switches of mc or evaporator are not ok.
- Following defrost cycles will be aligned to the end of forced one.
- Add 100 to FPt parameter to enable the outer defrost drive on INP-4. The defrost is initiated by INP-4 closure; after defrost and until INP-4 is closed, the instrument does not leave the dripping mode, to coordinate with eventual other instruments.
- In case of hot gas defrost, both IA2 and IA3 must reach Ftt.
- 8 The "oFF" command disables the ripening functions and enables the storage. The ripening timers continue however to run also if their output is disabled. To restart the ripening timers, please do the "rES" (reset) command. The "on" command enables the ripening functions without restarting the timers. To begin a new ripening cycle, please do the "rES" command. The minus sign on display ("-") means that you have already reset the timers.
- 9 At the end of the ripening cycle the temperature is set to t5 until the manual reset of the ripening cycle.
- 10 The stop command resets forced operation counter.
- In case of probe control, ethylene timers and settings are not used. You can still activate forced injections. In case of disabled probe, rYY is 11 used to control curtain string motor when curtain is idle.
- To synchronize ethylene injection and ripening start, set dY0 = d0. 12
- First ethylene injection is delayed until room temperature reaches tY. tY has no effect over following ethylene injections. 13
- 14 To synchronize the beginning of further ethylene injections and air renews, set dY3=dA3.
- 15 To synchronize the cycles of further ethylene injections and air renews, set dY3=dA3.
- Set by the microcontroller can be manually overwritten. 16
- For variable-frequency drive (also named VFD or inverter), all of the speed regulation values are integer numbers expressing the output frequency 17 in Hz; do not exceed 50 Hz unless you are instructed so. For thyristor on-board regulation, instead, the speed values range between 0 and 255, where 255 is the maximum speed.
- 18
- Door operation disables every other keyboard operation. The first pressure of push button inside the room - near the door - switches on the light, the second one opens the door, the third one activates 19
- the "man in room" alarm.
 During the delay the flashing light is on. 20
- 21 For your safety, do not modify this parameter. This setting is supposed to be used just in case of emergency or testing.
- 22 No action if the light is switched on from inside the room.
- 23 Curtain operation disables every other operation keyboard operation.
- 24 For safety reason, door operation is disabled when curtain is enabled. Unrolling can be started also by a push button located near the depressure
- 25 When off, the refrigeration solenoid is steadily on during cooling, as long as overheating is higher then vtL or b3A is off.
- 26 The address of the central unit who is broadcasting pressure (usually 1). Use 0 for previous application H425V1 with no origin specification.
- 27 Caution! Low overheating causes liquid return and compressor damage.
- Overheating over the maximum forces valve anticipated opening.
- 29 Overheating under the minimum delays valve opening.
- 30 Caution! Short duty cycle reduces valve life.
- 31 Caution! Low overheating causes liquid return and compressor damage.
- 32 Caution! High adaptation speed causes swing in the suction line and damage to the compressor.
- 33 In turbo mode, the liquid refrigerant solenoid opens over vtt overheating, and closes at vtL.
- 34 Positive values mean temperature descent.
- 35 In H411V6, starting from revision 09, when the value of this parameter 23C is non-zero, while 23A, 23S, and 23L are all off, use this value as alarm threshold for the absolute difference between set point temperature and whichever product probe, use LCd as alarm delay, share the timer with the low CO2 alarm, and generate alarm A29, excessive set distance.
- In H411V6, starting from revision 09, when the value of this parameter 24C is non-zero, while 24A, 24S, and 24L are all off, use this value, 36 instead of tL, as safety minimum temperature for product probes, and use this value, instead of LtL, as low-temperature alarm threshold for product probes; use Ltd as alarm delay, share the timer with the low temperature alarm, and generate alarm A28, low product temperature. Keep tL as safety minimum temperature for air probes, and keep LtL as low-temperature alarm threshold for air probes.
- In H411V6, starting from revision 09, when the value of this parameter 28C is non-zero, while 28A, 28S, and 28L are all off, use this value as 37 alarm threshold for product probe spread, use Ltd as alarm delay, share the timer with the high temperature alarm, and generate alarm A27, excessive probe spread.
- 38 The low temperature differential is fixed, and alarm status stops at 0.2 °C above the set point.
- 39 The high temperature differential is fixed, and alarm status stops at 0.2 °C under the set point.
- 40 Passing from stand-by to on and at power on, there is a 5 second delay spent in a virtual stand-by.

Alarm list 3

Display	Alarm	
A01	low temperature	Low temperature limit has been reached.
A02	high temperature	High temperature limit has been reached.
A03	ethylene alarm	The ethylene safety device has disconnected.
A04	evaporator alarm	Evaporator thermal relay, or other evaporator safety device has disconnected.
A05	heating alarm	The heating safety device has disconnected.
A06	door open	Time limit for door opening has been reached.
A07	phase alarm	Heating overload/thermal relay disconnected, or missing mains phase - manual reset.
A08	fan 1 alarm	Depressure fan overload/thermal relay disconnected.
A09	fan 2 alarm	Depressure fan overload/thermal relay disconnected.
A10	fan 3 alarm	Depressure fan overload/thermal relay disconnected.



Display	Alarm	
A11	man in room alarm	Somebody remained trapped inside the room.
A12	RTC memory loss	Memory loss of real time clock [RTC] - timer reset.
A13	EEPROM invalid	EEPROM invalid.
A14	EEPROM read start	EEPROM read start failure
A15	EEPROM read end	EEPROM read end failure
A16	EEPROM write start	EEPROM write start failure.
A17	EEPROM write end	EEPROM write end failure.
A18	EEPROM write max	EEPROM failure - reached the maximum number of writing attempts.
A19	low CO2	Low CO2 limit has been reached.
A20	high CO2	High CO2 limit has been reached.

4 Slave alarm list

Display	Alarm	
A96	slave EEPROM	Failed write operation onto the slave EEPROM.
A97	out of range	The slave address EdS might be out of the master range, the latter going from 1 to PdS.
A98	no link	The slave does not receive any message from the master.
A99	lost link	The slave lost the communication with the master.

5 Button list

Push	n button	Function
B1	esc - stop - silence	Exit without saving from any menu - door/curtain stop - alarm buzzer silence.
B2	up - open	Up navigation in the menu - door opening.
B3	on / stand-by	Toggle between on and stand-by.
B4	left - light - roll	Left navigation in the menu - switch the light on and off - roll the curtain.
B5	down - close	Down navigation in the menu - door closure.
B6	right-menu-set-unroll	Right navigation in the menu - display and modify set point - enter the menu - unroll the curtain.
B7	light - door - alarm	Remote button near to the door inside the room: switch on the light, open the door, and trigger man-in-room alarm.
B8	curtain	Remote button near to the depressure box inside the room: switch on and off the curtain unrolling.

6 Led list

Led		Function
L1	cooling	On during cooling.
L2	depressure	On when all depressure fans are running.
L3	humidity	On when humidification is active.
L4	air renew	On during air renew - blinking slowly during pause and delay.
L5	heating	On during heating - blinking slowly during activation delay.
L6	ethylene	On during ethylene injection - blinking slowly when waiting for three events: temperature threshold (_tY), following injections (nY), first air renew (rYA).
L7	light	On when lighting is on - blinking slowly during deactivation delay.

7 Soft command list

Soft command		Function
1	new ripening	Start a new ripening. Save the one in progress, if any. Reset the ripening counter.
2	end ripening	End the ripening in progress, if any, and save it. Go to final temperature t5. Do not cancel planned air renew.
3	store green	Execute end ripening command, then go to green product storage.

8 How to ...



How to	Function
Switch between on and stand-by.	Keep pressed B3 button, to activate and deactivate stand-by. In stand-by every output is disabled except light,
	leds from L1 to L6 blink, timers continue to count.
Program the menu.	Keep pressed B6 to enter the menu. Navigate up and down with B2 and B5. Select the submenu by B6. Change the parameter by B2 and B5, press B6 to confirm, or B4 to go back without saving. The changes will have effect after the exit from programming pressing B4 repeatedly. Press B1 to exit immediately without
	saving any parameter.
Show or change temperature set.	Press shortly B6 - the display shows the current set point - change it by B2 and B5, and confirm it by B6. As alternative, enter the menu program as explained above, modify the parameter t0, then confirm it.
Reset timers.	For the resettable controls in the menu program, confirming "rES", then confirming "on_" or "oFF", has the joint effect of resetting timers and going into the enabled or disabled status.
Enter ripening mode.	Keep pressed B6+B3. As alternative, enter the menu program as explained above, set the parameter rrH, reset it in case it is a new ripening, then confirm it.
Enter storage mode.	Keep pressed B6+B1. As alternative, enter the menu program as explained above, set to oFF the parameter rrH, then confirm it.
Door operation.	Push B2 to open, B5 to close, and B1 to stop. If you are inside the room and the door is closed, press B7 once to switch on the light, press again to open the door, and again to trigger the man in room alarm. During door operation display shows "OPE" or "CLO". By default, when the door is open, the light is on and every other output is off. By default, door operation is disabled after the first ethylene injection and before subsequent air renew.
Curtain operation.	For safety reason, the curtain can be operated only when the door is fully open and the light is on. To activate the keyboard for the curtain, keep pressed B6+B4, then press shortly B6 or B8 to unroll, B4 to roll, B1 to stop, and again B1 to exit curtain mode. During curtain operation, every output is disabled. The display shows "Cur" with the curtain idle. "Unr" during unrolling, and "rOL" during rolling.

9 Shortcut list

Buttons to press	Shortcut description - keep pressed 5 seconds
B6+B3	Enter ripening mode.
B6+B1	Enter storage mode.
B6+B4	Activate the keyboard for curtain operation.
B6+B2	Force an immediate air renew.
B6+B5	Force an immediate ethylene injection.

10 Led and push button location

