

# CAREL IR33 Summary of operating parameters (v1.131)

### Set Point (cut out temp)

PRESS & hold for 2 sec **Set** Set point value will be displayed

PRESS **▲** or **def** To display required Set Point

PRESS **Set** To confirm and save Set Point

(Or adjust parameter "St")

### HACCP Parameters

To view HACCP alarm details

PRESS **Set** & **def** "HAn" will be displayed (Follow normal prog steps to view parameters)

To clear HACCP alarm (HACCP Flashing with HA) when in HACCP Menu

PRESS & hold for 5 sec **Set** & **def** After 5 seconds "rES" will be displayed to indicate the alarm is reset

### Parameter Access

#### "F" (frequent parameters)

PRESS & hold for 5 sec **Prg mute** "St" will be displayed

#### "C" (configuration parameters)

PRESS & hold for 5 sec **Prg mute** & **Set** "0" will be displayed

PRESS **▲** or **def** To display "22" (This is the Password)

PRESS **Set** To confirm password entry

See steps below for parameter modification

### Parameter Modification

Once level "F" or "C" has been accessed

PRESS **▲** or **def** To display the parameter to be modified (eg rd = diff)

PRESS **Set** To display the value the parameter is set to

PRESS **▲** or **def** To adjust the value of the parameter (eg rd = 2.0)

PRESS **Set** To display code of the parameter modified eg rd

Repeat above steps until all required parameters have been programmed

PRESS & hold for 5 sec **Prg mute** This is IMPORTANT. Without this step your parameters will not be saved!

### Block Level Access

Block programming access allows the user to scroll between menu blocks rather than scrolling through the complete parameter list

Once level "F" or "C" has been accessed and a parameter code is displayed,

PRESS for 1 sec **Prg mute** To display block code eg Pro for Probes, dEF for defrost

PRESS **▲** or **def** To display the next block code (eg FAn for fan)

PRESS **Set**

Follow these steps to adjust individual parameters

PRESS **Prg mute** IMPORTANT: Press and hold PRG for 5 sec when programming is completed (At any time to go back to block programming and repeat above)

Code	Block	Parameter	Model	Unit	Type	Min.	Max.	Def.	New
/2	Pro	Measurement stability	MSC	-	C	1	15	4	
/3	Pro	Probe display speed	MSC	-	C	0	15	0	
/4	Pro	Virtual probe	MSC	-	C	0	100	0	
/5	Pro	Select °C or °F (0 = °C)	MSC	flag	C	0	1	0	
/6	Pro	Decimal point (0 = decimal point)	MSC	flag	C	0	1	0	
/tl	Pro	Sensor shown on controller display (1= Control sen)	MSC	-	C	1	7	1	
/tE	Pro	Sensor shown on remote display	MSC	-	C	0	6	0	
/P	Pro	Type of probe (0= standard Carel NTC)	MSC	-	C	0	2	0	
/A2	Pro	Probe 2 configuration (eg 2=evap,3=cond)	MSC	-	C	0	4	2	
			-S-	-	C	0	4	0	
/A3	Pro	Probe 3 configuration (eg 2=evap,3=cond)	MSC	-	C	0	4	0	
/A4	Pro	Probe 4 configuration(eg 0=absent,2=evap,3=cond)	MSC	-	C	0	4	0	
/c1	Pro	Calibration of probe 1	MSC	°C/°F	C	-20	20	0.0	
/c2-4	Pro	Calibration of probe 2-3-4 /c2=probe 2, /c3=probe 3	MSC	°C/°F	C	-20	20	0.0	
St	Ctl	Temperature set point	MSC	°C/°F	F	r1	r2	0.0	
rd	Ctl	Controller differential	-SC	°C/°F	F	0.1	20	2.0	
m	Ctl	Dead Zone (when used 1 Heat 1 Cool)	-SC	°C/°F	C	0	60	4	
rr	Ctl	Reverse (heat) diff in dead zone control	-SC	°C/°F	C	0.1	20	2	
r1	Ctl	Minimum Set Point allowed	MSC	°C/°F	C	-50	r2	-50	
r2	Ctl	Maximum Set Point allowed	MSC	°C/°F	C	r1	200	60	
r3	Ctl	Mode 0=cool with defrost,1=cool only, 2=heating	-SC	flag	C	0	2	0	
r4	Ctl	Value to alter Set Point by from Digital Input	MSC	°C/°F	C	-20	20	3.0	
r5	Ctl	Enable temperature monitoring	MSC	flag	C	0	1	0	
rt	Ctl	Temperature monitoring interval	MSC	hours	F	0	999	-	
rH	Ctl	Max temperature recorded during period rt	MSC	°C/°F	F	-	-	-	
rL	Ctl	Min temperature recorded during period rt	MSC	°C/°F	F	-	-	-	
c0	CnP	Comp. and fan start delay at power up	-SC	min	C	0	15	0	
c1	CnP	Minimum time between 2 comp starts	-SC	min	C	0	15	0	
c2	CnP	Minimum compressor OFF time	-SC	min	C	0	15	0	
c3	CnP	Minimum compressor ON time	-SC	min	C	0	15	0	
c4	CnP	Duty setting	-SC	min	C	0	100	0	
cc	CnP	Duration of continuous cycle	-SC	hours	C	0	15	0	
c6	CnP	Alarm bypass after continuous cycle	-SC	hours	C	0	15	2	
c7	CnP	Maximum Pump-Down (PD) time	-SC	sec	C	0	900	0	
c8	CnP	Comp. start delay after opening Pump Down valve	-SC	sec	C	0	60	5	
c9	CnP	Enable autostart with Pump Down operation	-SC	flag	C	0	1	0	
c10	CnP	Select Pump-Down by time or pressure switch	-SC	flag	C	0	1	0	
c11	CnP	Second compressor start delay	-SC	s	C	0	250	4	
d0	dEF	Defrost type (0 = elec / temp, 1 = H.Gas / temp 2 = elec / time, 3 = hot gas / time.....)	-SC	flag	C	0	4	0	
dl	dEF	Interval between defrosts (if not using real time)	-SC	hours	F	0	250	8	
dt1	dEF	End defrost temperature, (if d0 = 0 or 1)	-SC	°C/°F	F	-50	200	4.0	
dt2	dEF	End defrost temperature, aux evap (if selected)	-SC	°C/°F	F	-50	200	4.0	
dP1	dEF	Maximum defrost duration	-SC	min	F	1	250	30	
dP2	dEF	Maximum defrost duration, aux evap.	-SC	min	F	1	250	30	
d3	dEF	Defrost- delay starting defrost after stopping comp	-SC	min	C	0	250	0	
d4	dEF	Defrost at power up (0 = no, 1 = yes)	-SC	flag	C	0	1	0	

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Technical literature can be downloaded from [www.carel.com](http://www.carel.com)

Code	Block	Parameter	Model	Unit	Type	Min.	Max.	Def.	New
d5	dEF	Defrost delay at power up (if d4=1)	-SC	min	C	0	250	0	
d6	dEF	Display during def.(0=dF (flash),1=locked,2=dEF)	-SC	-	C	0	2	1	
dd	dEF	Dripping time after defrost	-SC	min	F	0	15	2	
d8	dEF	Bypass alarms after defrost	-SC	hours	F	0	15	1	
d9	dEF	Defrost priority over compressor protection	-SC	flag	C	0	1	0	
d/1/d/2	dEF	Display defrost probe temp d/1=def P1,d/2=def P2)	MSC	°C/°F	F	-	-	-	
dC	dEF	Time basis for defrost (0=hr/min, 1=min/sec)	-SC	flag	C	0	1	0	
d10	dEF	Compressor run time for demand defrost	-SC	min	C	0	250	0	
d11	dEF	Comp. run time temp set for demand defrost	-SC	°C/°F	C	-20	20	1.0	
d12	dEF	Advanced defrost enable	-SC	-	C	0	3	0	
dn	dEF	Nominal defrost duration (smart defrost)	-SC	-	C	1	100	65	
dH	dEF	Proportional factor for variation in 'dl' (smart DF)	-SC	-	C	0	100	50	
A0	ALn	Alarm and fan differential	MSC	°C/°F	C	0.1	20	2.0	
A1	ALn	Type of alarm for AL and AH (0=rel. 1=absolute)	MSC	flag	C	0	1	0	
AL	ALn	Low alarm temp (see A1 for absol. or relative)	MSC	°C/°F	F	-50	200	0.0	
AH	ALn	High alarm temp (see A1 for absol. or relative)	MSC	°C/°F	F	-50	200	0.0	
Ad	ALn	Low and high temperature alarm delay	MSC	min	F	0	250	120	
A4	ALn	Configuration of digital input 1	-SC	-	C	0	15	0	
A5	ALn	Configuration of digital input 2	MSC	-	C	0	15	0	
A6	ALn	Duty setting for comp from digital in alarm	-SC	min	C	0	100	0	
A7	ALn	External alarm delay if using digital input	-SC	min	C	0	250	0	
A8	ALn	Enable alarms 'Ed1' and 'Ed2' (defrost end on time)	-SC	flag	C	0	1	0	
Ado	ALn	Door switch light management mode	MSC	flag	C	0	1	0	
Ac	ALn	High condenser temperature alarm set point	-SC	°C/°F	C	0.0	200	70.0	
AE	ALn	High cond. temp. alarm differential	-SC	°C/°F	C	0.1	20	10.0	
Acd	ALn	High cond. temp. alarm delay	-SC	min	C	0	250	0	
AF	ALn	Light sensor off time	-SC	s	C	0	250	0	
ALF	ALn	Antifreeze alarm set point	MSC	°C/°F	C	-50	200	-5	
AdF	ALn	Antifreeze alarm delay	MSC	min	C	0	15	1	
F0	Fan	Fan management (0=according to F2,F3,Fd 1 = amb - evap, 2 = evap temp (St + F1)	--C	flag	C	0	2	0	
F1	Fan	Fan start temperature	--C	°C/°F	F	-50	200	5.0	
F2	Fan	Fans cycle with comp (0=no, 1=yes)	--C	flag	C	0	1	1	
F3	Fan	Fans in defrost (0 = on, 1 = off)	--C	flag	C	0	1	1	
F4	Fan	Condenser fan off temperature	MSC	°C/°F	C	-50	200	40.0	
F5	Fan	Condenser fan differential	MSC	°C/°F	C	0.1	20	5.0	
Fd	Fan	Fans delay after dripping	--C	min	F	0	15	1	
H0	CnF	Serial address	MSC	-	C	0	207	1	
H1	CnF	Function of relay 4 (0,1=alarm,2=aux,3=light...)	MSC	flag	C	0	11	1	
H2	CnF	Keypad and IR locking	MSC	flag	C	1	6	1	
H3	CnF	Remote control enabling code	MSC	-	C	0	255	0	
H4	CnF	Disable buzzer (0=enabled, 1 = disabled)	MSC	flag	C	0	1	0	
H5	CnF	Function of relay 5 (IR33DIN & PowerCompact)	MSC	flag	C	0	11	1	
H6	CnF	Buttons to lock when keypad locked	MSC	-	C	0	255	0	
H8	CnF	Select output to activate with time band	MSC	flag	C	0	1	0	
HPr	CnF	Print profile	MSC	-	C	0	15	0	
H9	CnF	Enable set point change with time	MSC	flag	C	0	1	0	
Hdn	CnF	Number of default parameter sets	MSC	flag	C	0	6	0	

Code	Block	Parameter	Model	Unit	Type	Min.	Max.	Def.	New
Hdh	CnF	Anti-sweat heater control offset	MSC	°C/°F	C	-50	200	0	
HrL	CnF	Enable remote ind. of light status	MSC	flag	C	0	1	0	
HrA	CnF	Enable remote ind. of aux status	MSC	flag	C	0	1	0	
HsA	CnF	Enable alarms on network devices	MSC	flag	C	0	1	0	
In	CnF	Standard control or master or slave	MSC	flag	C	0	6	0	
HAn/HFn	HcP	Number of events HA/HF occurred	MSC	-	C	0	15	-	
HA/HF	HcP	Date/time of most recent HA/HF	MSC	-	C	-	-	-	
y__	HcP	Year	****	years	*	0	99	-	
M__	HcP	Month	****	months	*	1	12	-	
d__	HcP	Day	****	days	*	1	7	-	
h__	HcP	Hour	****	hours	*	0	23	-	
n__	HcP	Minute	****	min	*	0	59	-	
t__	HcP	Duration	****	hours	*	0	99	-	
Htd	HcP	HACCP alarm delay	MSC	min	C	0	250	0	
td1-td8	rtc	Defrost time band 1/8	-SC	-	C	-	-	-	
d__	rtc	Day	****	days	*	0	11	0	
h__	rtc	Hour	****	hours	*	0	23	0	
n__	rtc	Minute	****	min	*	0	59	0	
ton	rtc	Light/aux ON time setting	-SC	-	C	-	-	-	
d__	rtc	Day	****	days	*	0	11	0	
h__	rtc	Hour	****	hours	*	0	23	0	
n__	rtc	Minute	****	min.	*	0	59	0	
tof	rtc	Light/aux OFF time setting	-SC	-	C	-	-	-	
d__	rtc	Day	****	days	*	0	11	0	
h__	rtc	Hour	****	hours	*	0	23	0	
n__	rtc	Minute	****	min.	*	0	59	0	
tc	rtc	RTC date/time setting	MSC	-	C	-	-	-	
y__	rtc	Years	****	years	0	0	99	00	
M__	rtc	Month	****	months	1	1	12	1	
d__	rtc	Day of the month	****	days	1	1	31	1	
u__	rtc	Day of the week	****	days	6	1	7	6	
h__	rtc	Hour	****	hours	0	0	23	0	
n__	rtc	Minute	****	min	0	0	59	0	

Code	Icon on the display	Alarm relay	Buzzer	Reset	Description
'E'	flashing	active	active	automatic	virtual control probe fault
'E0'	flashing	OFF	OFF	automatic	room probe S1 fault
'E1'	flashing	OFF	OFF	automatic	defrost probe S2 fault
'E2'	flashing	OFF	OFF	automatic	probe S3 fault
'E3'	flashing	OFF	OFF	automatic	probe S4 fault
' '	no	OFF	OFF	automatic	probe not enabled
'LO'	flashing	active	active	automatic	low temperature alarm
'HI'	flashing	active	active	automatic	high temperature alarm
'IA'	flashing	active	active	automatic	immediate alarm from external contact
'dA'	flashing	active	active	automatic	delayed alarm from external contact