

# IDNext 902 P -HC

Electronic controllers compatible with flammable refrigerant gases

## Parameters Tables



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## User Parameters IDNext 902 P

Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
<b>SEt</b>	Control setpoint with range between the minimum <b>LSE</b> setpoint and the maximum <b>HSE</b> setpoint. The setpoint value is set in the 'Machine Status' menu.	<b>LSE...HSE</b>	°C/°F		3.0	3.0	0.0	0.0
<b>diF</b>	Compressor relay activation differential; the compressor stops when the setpoint value is reached (as indicated by the control probe) and restarts at a temperature value equal to the setpoint plus the differential value.	0.1...30.0	°C/°F		2.0	2.0	2.0	2.0
<b>LSE</b>	Minimum setpoint value.	-67.0... <b>HSE</b>	°C/°F		-55.0	-55.0	-55.0	-55.0
<b>HSE</b>	Maximum setpoint value.	<b>LSE</b> ...302	°C/°F		140.0	140.0	140.0	140.0
<b>dEt</b>	Defrost timeout. Determines the maximum duration of the defrost	1...250	min		30	30	30	1
<b>dit</b>	Time interval between one defrost and the next	0...250	hours		6	6	6	-
<b>HAL</b>	Maximum temperature alarm. Temperature value (in an absolute or relative value - see <b>Att</b> ) which, when exceeded, will lead to the activation of alarm signaling.	<b>LAL</b> ...302	°C/°F		150.0	150.0	150.0	150.0
<b>LAL</b>	Minimum temperature alarm. Temperature value (in an absolute or relative value - see <b>Att</b> ) which, when not reached, will lead to the activation of alarm signaling.	-67,0... <b>HAL</b>	°C/°F		-50.0	-50.0	-50.0	-50.0
<b>CA1 (!)</b>	Positive or negative temperature value to be added to the value of Pb1.	-30.0...30.0	°C/°F		0.0	0.0	0.0	0.0
<b>PS1</b>	When enabled ( <b>PS1</b> ≠0) this is the access key for the user parameters.	0...250	num		0	0	0	0
<b>tAb</b>	Reserved: read-only parameter.	/	/		/ (not in applications)			

**Note:** the "User" menu parameters also include **PA2**, which allows access to the "Installer" menu.

**Note:** for the full list of parameters, see the section "**Installer parameters**".

## Installer Parameters IDNext 902 P

Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
<b>SEt</b>	Control setpoint with range between the minimum <b>LSE</b> setpoint and the maximum <b>HSE</b> setpoint. The setpoint value is set in the 'Machine Status' menu.	<b>LSE</b> ... <b>HSE</b>	°C/°F		3.0	3.0	0.0	0.0
<b>CP (Compressor)</b>								
<b>diF</b>	Compressor relay activation differential; the compressor stops when the setpoint value is reached (as indicated by the control probe) and restarts at a temperature value equal to the setpoint plus the differential value.	0.1...30.0	°C/°F		2.0	2.0	2.0	2.0
<b>LSE</b>	Minimum setpoint value.	-67.0... <b>HSE</b>	°C/°F		-55.0	-55.0	-55.0	-55.0
<b>HSE</b>	Maximum setpoint value.	<b>LSE</b> ...302	°C/°F		140.0	140.0	140.0	140.0
<b>HC</b>	The regulator implements either cold operation (set " <b>C</b> (0)") or for hot (set " <b>H</b> (1)").	C/H	flag		C	C	C	H
<b>ont</b>	Regulator power-on time for a inoperable probe: <ul style="list-style-type: none"> <li>if <b>Ont</b> = 1 and <b>Oft</b> = 0 compressor is always on</li> <li>if <b>Ont</b> = 1 and <b>Oft</b> &gt; 0 compressor in duty cycle mode</li> </ul>	0...250	min		15	15	15	15
<b>oFt</b>	Regulator power-off time for a inoperable probe: <ul style="list-style-type: none"> <li>if <b>Oft</b> = 1 and <b>Ont</b> = 0 compressor is always off</li> <li>if <b>Oft</b> = 1 and <b>Ont</b> &gt; 0 compressor in duty cycle mode</li> </ul>	0...250	min		15	15	15	15
<b>don</b>	Compressor relay activation delay time after request	0...250	s		0	0	0	0
<b>doF</b>	Delay time after power-off: the delay time indicated must elapse between deactivation of the compressor relay and the next power-on.	0...250	min		0	0	0	0
<b>dbi</b>	Delay time between power-ons; the delay time indicated must elapse between two consecutive compressor power-ons.	0...250	min		0	0	0	0
<b>Cit</b>	Minimum compressor activation time before it can be deactivated. If <b>Cit</b> = 0 it is not active.	0...250	min		0	0	0	0
<b>CAt</b>	Maximum compressor activation time before it can be deactivated. If <b>CAt</b> = 0 it is not active.	0...250	min		0	0	0	0

Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
odo (!)	Delay in activating outputs after the controller is powered on or after a power failure. <b>0</b> = not active.	0...250	min		0	0	0	0
dcS	"Deep Cooling Cycle" setpoint	-67.0...302	°C/°F		0.0	0.0	0.0	0.0
tdC	"Deep Cooling Cycle" duration	0...250	min		0	0	0	0
dcc	Defrost activation delay after a "Deep Cooling Cycle"	0...250	min		0	0	0	0
<b>dEF (Defrost)</b>								
doH	Defrost cycle activation delay from the call	0...250	min		0	0	0	0
dEt	Defrost timeout. Determines the maximum duration of the defrost	1...250	min		30	30	30	1
dPo	Defrost activation request at power-on, if the temperature measured by Pb2 allows. <ul style="list-style-type: none"> <li>n(0) = no</li> <li>y(1) = yes.</li> </ul>	n/y	flag		n	n	n	n
tCd	Minimum period of time with the compressor ON or OFF before defrost is activated.	-127...127	min		0	0	0	0
Cod	Time with the compressor OFF before defrost is activated	0...250	min		0	0	0	0
dMr	Enables the defrost count reset in the case of manual defrosting. <ul style="list-style-type: none"> <li>n = count reset does not take place</li> <li>y = count reset takes place</li> </ul>	n/y	flag		n	n	n	n
d00	Compressor running time before defrost is activated	0...250	hours		0	0	0	-
d01	<b>d00</b> unit of measure. <ul style="list-style-type: none"> <li>0 = hours</li> <li>1 = minutes</li> <li>2 = seconds.</li> </ul>	0/1/2	num		0	0	0	-
dit	Time interval between one defrost and the next	0...250	hours		6	6	6	0
d11	<b>dit</b> unit of measure. <ul style="list-style-type: none"> <li>0 = hours</li> <li>1 = minutes</li> <li>2 = seconds.</li> </ul>	0/1/2	num		0	0	0	-
d20	Can be used to activate the defrost when the compressor is off. <ul style="list-style-type: none"> <li>0 = disabled. Defrost is not activated.</li> <li>1 = enabled. Defrost is activated when the compressor is off.</li> </ul>	0/1	flag		0	0	0	-
<b>AL (Alarms)</b>								

Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
<b>Att</b>	Sets the absolute or relative value for parameters <b>HAL</b> and <b>LAL</b> . <ul style="list-style-type: none"> <li>• <b>0</b> = absolute value</li> <li>• <b>1</b> = relative value</li> </ul>	0/1	flag		0	0	0	0
<b>AFd</b>	Alarm differential.	0,1...25,0	°C/°F		2.0	2.0	2.0	2.0
<b>HAL</b>	Maximum temperature alarm. Temperature value (in an absolute or relative value - see <b>Att</b> ) which, when exceeded, will lead to the activation of alarm signaling.	<b>LAL</b> ...302	°C/°F		150.0	150.0	150.0	150.0
<b>LAL</b>	Minimum temperature alarm. Temperature value (in an absolute or relative value - see <b>Att</b> ) which, when not reached, will lead to the activation of alarm signaling.	-67,0... <b>HAL</b>	°C/°F		-50.0	-50.0	-50.0	-50.0
<b>PAo</b>	Alarm exclusion time when switching on the controller, after a power failure.	0...10	min*10		0	0	0	0
<b>dAo</b>	Temperature alarm exclusion time after defrosting.	0...999	min		0	0	0	0
<b>oAo</b>	Alarm signaling delay after deactivation of the digital input (door closure). Alarm refers to high and low temperature alarms.	0...10	hours		0	0	0	0
<b>tDo</b>	Door open alarm activation delay time.	0...250	min		0	0	0	0
<b>tAo</b>	Temperature alarm signaling delay time.	0...250	min		0	0	0	0
<b>dAt</b>	Defrost ended due to timeout alarm indication. <ul style="list-style-type: none"> <li>• <b>n(0)</b> = alarm not activated</li> <li>• <b>y(1)</b> = alarm activated.</li> </ul>	n/y	flag		n	n	n	-
<b>EAL</b>	An external alarm inhibits the regulators. <ul style="list-style-type: none"> <li>• <b>0</b> = does not inhibit the regulators</li> <li>• <b>1</b> = compressor and defrost inhibited</li> <li>• <b>2</b> = fans, compressor and defrost inhibited;</li> </ul>	0/1/2	flag		0	0	0	0
<b>SA3</b>	Probe 3 alarm setpoint.	-67,0...302	°C/°F		0.0	0.0	0.0	0.0
<b>dA3</b>	Probe 3 alarm differential.	0.1...30.0	°C/°F		1.0	1.0	1.0	1.0
<b>rFt</b>	Low refrigerant alarm signaling delay.	0...250	min		0 (non nelle applicazioni)			
<b>Lit (Lights and digital inputs)</b>								
<b>dOd</b>	Digital input shuts off utilities. <ul style="list-style-type: none"> <li>• <b>0</b> = disabled</li> <li>• <b>1</b> = disables fans</li> <li>• <b>2</b> = disables compressor</li> <li>• <b>3</b> = disables fans and compressor.</li> </ul>	0...3	num		0	0	0	-

Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
<b>dAd</b>	Digital input activation delay	0...250	min		0	0	0	-
<b>dCo</b>	Compressor switch-off delay from door opening.	0...250	min		1	1	1	-
<b>PrE (Pressure switch)</b>								
<b>PEn</b>	Number of errors permitted per minimum/maximum pressure switch input	0...15	num		0	0	0	-
<b>PEi</b>	Minimum/maximum pressure switch error count interval	1...99	min		1	1	1	-
<b>PEt</b>	Compressor activation delay after pressure switch deactivation	0...255	min		0	0	0	-
<b>EnS (Energy Saving)</b>								
<b>oSP</b>	Temperature value to be added to the setpoint in the case of an enabled reduced set (Economy function).	-30.0...30.0	°C/°F		0.0	0.0	0.0	0.0
<b>odF</b>	Differential offset during an energy saving cycle or reduced set.	0.1...30.0	°C/°F		2.0	2.0	2.0	2.0
<b>Add (Communication)</b>								
<b>Adr</b>	Modbus protocol controller address.	1...247	num		1 (not in applications)			
<b>bAU</b>	Modbus Baudrate selection. <ul style="list-style-type: none"> <li>• <b>96</b> (0) = 9600 baud</li> <li>• <b>192</b> (1) = 19200 baud</li> <li>• <b>384</b> (2) = 38400 baud</li> </ul>	96/192/384	num		96 (not in applications)			
<b>Pty</b>	Modbus parity bit. <ul style="list-style-type: none"> <li>• <b>n</b>(0) = none</li> <li>• <b>E</b>(1) = even</li> <li>• <b>o</b>(2) = odd.</li> </ul>	n/E/o	num		E (not in applications)			
<b>diS (Display)</b>								
<b>dro</b>	Selects the unit of measure used when displaying the temperature read by the probes. (0 = °C, 1 = °F). <b>Note:</b> changing from °C to °F or vice-versa does NOT change the <b>SEt</b> , <b>diF</b> values, etc. (example: <b>SEt</b> = 10°C becomes 10°F).	0/1	flag		0	0	0	0
<b>CA1 (!)</b>	Positive or negative temperature value to be added to the value of Pb1.	-30.0...30.0	°C/°F		0.0	0.0	0.0	0.0
<b>CA3 (!)</b>	Positive or negative temperature value to be added to the value of Pb3.	-30.0...30.0	°C/°F		0.0	0.0	0.0	0.0

Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
<b>CAi</b>	<p>Activation of the calibration value.</p> <ul style="list-style-type: none"> <li>• <b>0</b> = Adds the value to the temperature value displayed</li> <li>• <b>1</b> = Adds the value to the temperature used by the regulators and not to the one displayed</li> <li>• <b>2</b> = Adds the value to the temperature used by the regulators and to the temperature displayed.</li> </ul>	0/1/2	num		2	2	2	2
<b>LoC</b>	<p>Keypad lock.</p> <ul style="list-style-type: none"> <li>• <b>n(0)</b> = Keypad lock disabled</li> <li>• <b>y(1)</b> = Keypad lock enabled (on startup or when 30 seconds have passed since the last action carried out on the user interface)</li> </ul>	n/y	flag		y	y	y	y
<b>ddd</b>	<p>Selects the type of value to show on the display.</p> <ul style="list-style-type: none"> <li>• <b>0</b> = setpoint</li> <li>• <b>1</b> = Pb1 probe</li> <li>• <b>2</b> = Pb2 probe</li> <li>• <b>3</b> = Pb3 probe.</li> </ul>	0...3	num		1	1	1	1
<b>ddL</b>	<p>Display mode during defrosting.</p> <ul style="list-style-type: none"> <li>• <b>0</b> = display the temperature read by Pb1</li> <li>• <b>1</b> = inhibits reading on the value of Pb1 at the start of defrost and until the setpoint is reached</li> <li>• <b>2</b> = displays label <b>dEF</b> during defrost until the setpoint is reached.</li> </ul>	0/1/2	num		0	0	0	0
<b>Ldd</b>	<p>Display unlock timeout value - label <b>dEF</b></p>	0...250	min		30	30	30	30
<b>ndt</b>	<p>Display with decimal point.</p> <ul style="list-style-type: none"> <li>• <b>n(0)</b> = no</li> <li>• <b>y(1)</b> = yes.</li> </ul>	n/y	flag		y	y	y	y
<b>FSE</b>	<p>Sets the value (COEFF) used by the low-pass filter to calculate the temperature value to be displayed.</p> <ul style="list-style-type: none"> <li>• <b>0</b> = disabled</li> <li>• <b>1</b> = 200</li> <li>• <b>2</b> = 100</li> <li>• <b>3</b> = 50</li> <li>• <b>4</b> = 25</li> <li>• <b>5</b> = 12</li> <li>• <b>6</b> = 6</li> <li>• <b>7</b> = 3.</li> </ul>	0...7	num		0	0	0	0
<b>FdS</b>	<p>Filter disabling threshold.</p>	-67.0...302	°C/°F		0.0	0.0	0.0	0.0
<b>Ftt</b>	<p>Time that has passed beyond the value of <b>FdS</b> before the filter is disabled.</p>	0...250	min		0	0	0	0



Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
<b>FHt</b>	Filter sampling interval.	1...250	s		1	1	1	1
<b>PS1</b>	When enabled ( <b>PS1</b> ≠0) this is the access key for the user parameters.	0...250	num		0	0	0	0
<b>PS2</b>	When enabled ( <b>PS2</b> ≠0) this is the access key for the installer parameters.	0...250	num		15	15	15	15
<b>CnF (Configuration)</b>								
<b>H00</b>	Selects the probe type. <ul style="list-style-type: none"> <li>• <b>0</b> = PTC</li> <li>• <b>1</b> = NTC</li> <li>• <b>2</b> = Pt1000.</li> </ul>	0/1/2	flag		1	1	1	1
<b>H08</b>	Stand-by operating mode. <ul style="list-style-type: none"> <li>• <b>0</b> = display off; the regulators are active and the device signals possible alarms by reactivating the display</li> <li>• <b>1</b> = display off; the regulators and the alarms are blocked</li> <li>• <b>2</b> = the display shows the label "OFF"; the regulators and alarms are inhibited.</li> </ul>	0/1/2	num		2	2	2	2
<b>H11</b>	Configurazione ingresso digitale 1 ( <b>DI</b> ) / polarità. <ul style="list-style-type: none"> <li>• <b>0</b> = disabilitato</li> <li>• <b>±1</b> = sbrinamento</li> <li>• <b>±2</b> = set ridotto</li> <li>• <b>±3</b> = ausiliario</li> <li>• <b>±4</b> = micro-porta</li> <li>• <b>±5</b> = allarme esterno</li> <li>• <b>±6</b> = stand-by</li> <li>• <b>±7</b> = pressostato</li> <li>• <b>±8</b> = abbattimento rapido</li> <li>• <b>±9</b> = luce</li> <li>• <b>±10</b> = risparmio energetico</li> </ul> <p><b>Nota:</b></p> <ul style="list-style-type: none"> <li>• segno "+" indica che l'ingresso è attivo se il contatto è chiuso.</li> <li>• segno "-" indica che l'ingresso è attivo se il contatto è aperto.</li> </ul>	-10...+10	num		0	0	0	0
<b>H21</b>	Configuration of digital output 1 ( <b>Out1</b> ). <ul style="list-style-type: none"> <li>• <b>0</b> = disabled</li> <li>• <b>1</b> = compressor</li> <li>• <b>2</b> = defrost</li> <li>• <b>3</b> = evaporator fans</li> <li>• <b>4</b> = alarm</li> <li>• <b>5</b> = auxiliary</li> <li>• <b>6</b> = stand-by</li> <li>• <b>7</b> = light</li> <li>• <b>8</b> = reserved</li> <li>• <b>9</b> = compressor 2</li> <li>• <b>10</b> = reserved</li> <li>• <b>11</b> = condenser fans</li> <li>• <b>12</b> = heater deadband control</li> <li>• <b>13</b> = reserved</li> </ul>	0...13	num		1	1	1	1

Parameter	Description	Range	MU	Custom	Default	AP1	AP2	AP3
<b>H31</b>	Configuration of $\Delta$ key. <ul style="list-style-type: none"> <li>• 0 = disabled</li> <li>• 1 = defrost</li> <li>• 2 = auxiliary</li> <li>• 3 = reduced set</li> <li>• 4 = stand-by</li> <li>• 5 = reserved</li> <li>• 6 = reserved</li> <li>• 7 = deep cooling</li> <li>• 8 = light.</li> </ul>	0...8	num		1	1	1	0
<b>H32</b>	Configuration of $\nabla$ key. Same as <b>H31</b> .	0...8	num		0	0	0	0
<b>H33</b>	Configuration of $\ominus$ key. Same as <b>H31</b> .	0...8	num		4	4	4	4
<b>H43</b>	Probe Pb3 present. <ul style="list-style-type: none"> <li>• n(0) = not present</li> <li>• y(1) = present</li> <li>• 2EP(2) = second evaporator.</li> </ul>	n/y/2EP	flag		n	n	n	n
<b>H60</b>	Display selected application. 0 = disabled; 1 = AP1; 2 = AP2; 3 = AP3.	0...3	num		1 (not in applications)			
<b>tAb</b>	Reserved: read-only parameter.	/	/		/ (not in applications)			
<b>FPr (UNICARD)</b>								
<b>UL</b>	Transfer of the programming parameters from the controller to the UNICARD.	/	/		- (not in applications)			
<b>Fr</b>	UNICARD formatting. Deletes all data on the UNICARD. <b>Note:</b> the use of parameter <b>Fr</b> results in the loss of all data entered. This operation cannot be reversed.	/	/		- (not in applications)			
<b>FnC (Functions)</b>								
<b>tAL</b>	Force alarm acknowledgment	/	/		- (not in applications)			
<b>rAP</b>	Reset pressure switch alarms	/	/		- (not in applications)			
<b>Cnt</b>	Reset TelevisAir diagnostic counters (see Reset TelevisAir diagnostic counters)	/	/		- (not in applications)			

**Note:** if one or more parameters in folder **CnF** or marked with (!) are changed, the controller must be switched off and then on again to make sure it works properly.



**Eliwell Controls srl**

Via dell'Industria, 15 Z.I. Paludi

32016 Alpago (BL) Italy

T +39 (0) 437 986 111

**[www.eliwell.com](http://www.eliwell.com)**

**Technical Customer Support**

T +39 (0) 437 986 300

E [techsuppeliwell@se.com](mailto:techsuppeliwell@se.com)

**Sales**

T +39 (0) 437 986 100 (Italy)

T +39 (0) 437 986 200 (other countries)

E [saleseliwell@se.com](mailto:saleseliwell@se.com)