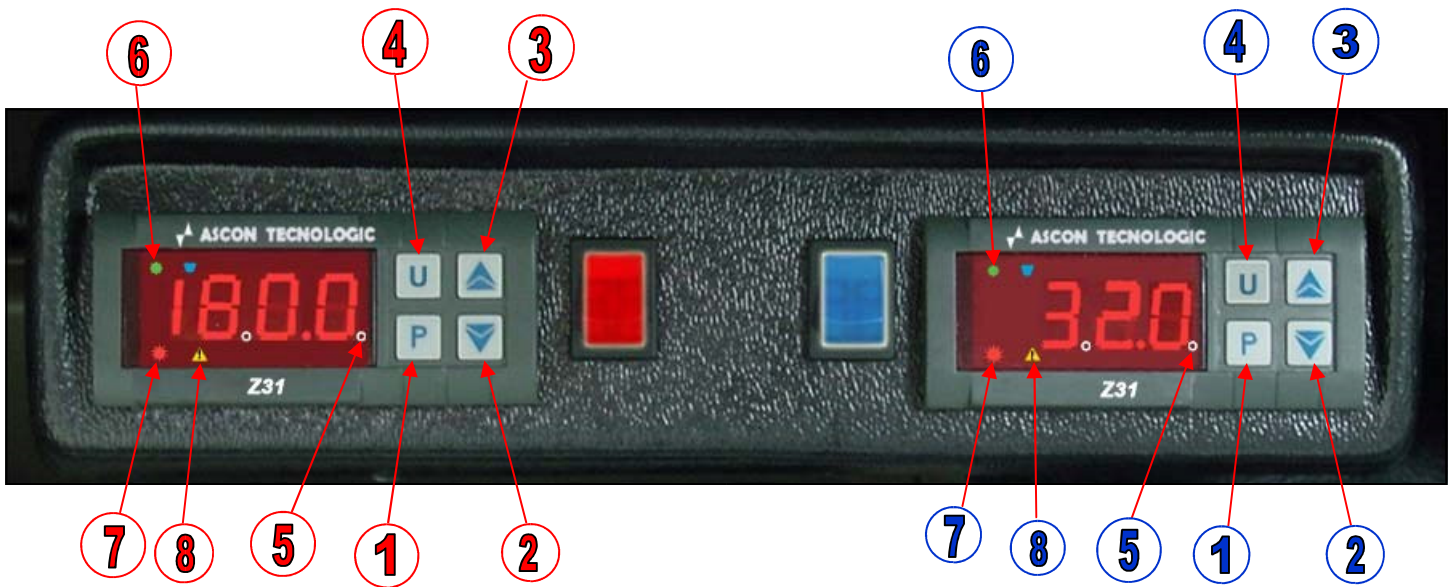


ASCON TECHNOLOGIC CONTROLLER INSTRUCTIONS FOR REFRIGERATOR—Z-31



PROGRAMMING REFRIGERATION SET POINT

1. Press key **P (1) and HOLD**, until **RED** light appears.
2. Use arrows **(3) UP** or **(2) DOWN** until **S.LS** displays.
3. Press **P (1)**, then arrow **UP** or **DOWN** until **34.0°** displays.
4. Press **P (1)**, then arrow **UP** or **DOWN** until **S.HS** displays.
5. Press **P (1)**, then arrow **UP** or **DOWN** until **39.0°** displays.
6. Press **P (1)**, then arrow **UP** or **DOWN** until **i.uP** displays.
7. Press **P (1)**, then arrow **UP** or **DOWN** until **9F** displays.
8. Press **P (1)**, then arrow **UP** or **DOWN** until **r.d** displays.
9. Press **P (1)**, then arrow **UP** or **DOWN** until **+5.0** displays.
10. Press **P (1)**, then arrow **UP** or **DOWN** until **r.HC** displays.
11. Press **P (1)**, then arrow **UP** or **DOWN** until **C** displays.
12. Press **P (1)**, then arrow **UP** or **DOWN** until **SP** displays.
13. Press **P (1)**, then arrow **UP** or **DOWN** until **34.0°** displays.
14. **EXIT** from the Set Programming mode occurs **AUTOMATICALLY** by not pressing any key for 5 seconds, thus the temperature process value will again be displayed.

NOTE:

Press and Hold key (approximately 5 seconds) in step #1 only, All other steps press and release.

Delivery Concepts pre-sets all refrigerator controllers at 34.0° degrees min/39.0° degrees max setting with -5 differential unless specified otherwise.

GUIDE TO NUMBERS ON DIGITAL CONTROL (RED & BLUE)

1. **KEY P** : Used for the set point setting and to program the functioning parameters.
2. **KEY DOWN** : Used to decrease the values to be set and for selecting parameters.
3. **KEY UP** : Used to increase values to be set or to select parameters.
4. **KEY U** : Press for 2 seconds to exit programming.
5. **LED Set** : Indicates the input in programming mode and the programming level of the parameters.
6. **LED OUT - COOL** : Indicates the control output status (compressor or the temperature control device) when the instrument is programmed for cooling operation; on (on), off (off) or inhibited (flashing).
7. **LED OUT - HEAT** : Indicates the control output status (compressor or the temperature control device) when the instrument is programmed for heating operation; on (on), off (off) or inhibited (flashing).
8. **LED ALARM** : Indicates alarm status on (on), off (off) or silenced (flashing)

ASCON TECHNOLOGIC CONTROLLER INSTRUCTIONS FOR REFRIGERATOR—Z-31

Programmable Parameters Table

Here below is a description of the pertinent parameters for oven operation.

Parameter	Description	Range	Def.	Note	
<i>S - parameters relative to Set Point</i>					
1	S.HS	Maximum Set Point	LS ÷ 999	39	(#V)
2	S.LS	Minimum Set Point	99.9/HS	34	(#V)
3	SP	Set Point	LS ÷ HS	34	(#V)
<i>i. - parameters relative to input</i>					
4	i.SE	Probe Type	Pt / nt	Pt	
5	i.uP	Unit of measurement and resolution (decimal point) CO = °C with 1 °res FO = °F with 1 °res C1 = °C with 0.1 °res F1 = °F with 0.1 °res	CO / FO / C1 / F1	FO	
<i>r. - parameters relative to temperature control</i>					
8	r.d	Differential (<i>Hysteresis</i>)	0.0 ÷ 30.0 °C/°F	5.0	(#V)
11	r.HC	Output operating mode H= Heating C= Cooling	HEAT -COOL	COOL	(#V)

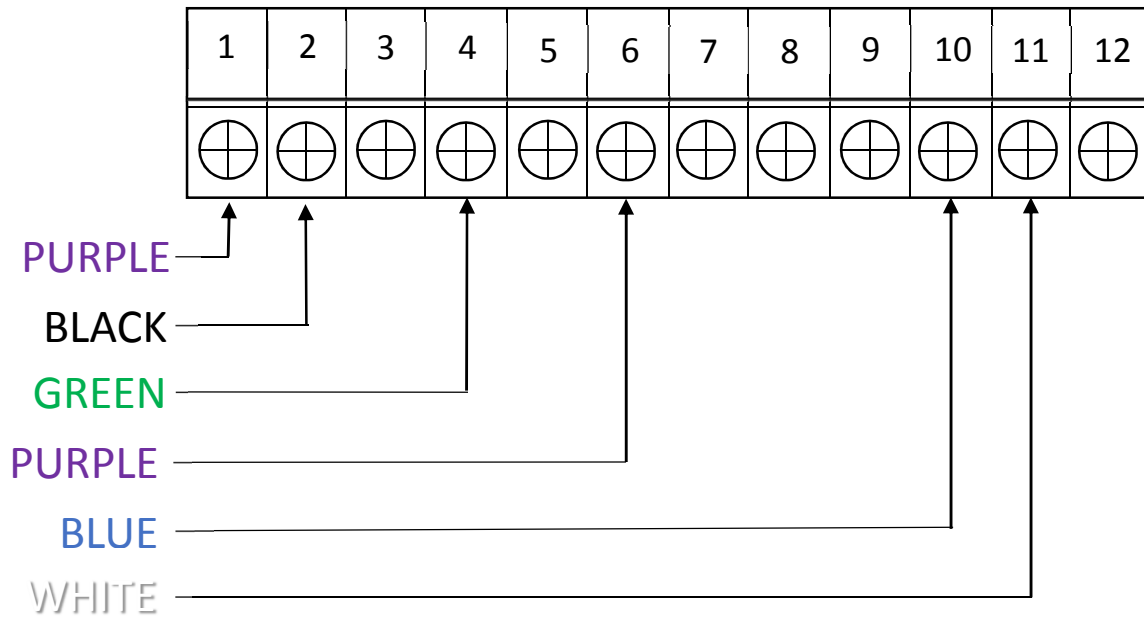
Problems, Maintenance and Warranty

Error Signaling

Error	Reason	Action
E1 -E1	The probe may be interrupted (E) or in short circuit (-E), or may measure a value outside the range allowed	Check the correct connection of the probe with the instrument and check that the probe works correctly.
EPr	Internal EEPROM error	Press key P
err	Fatal Memory error	Replace the instrument

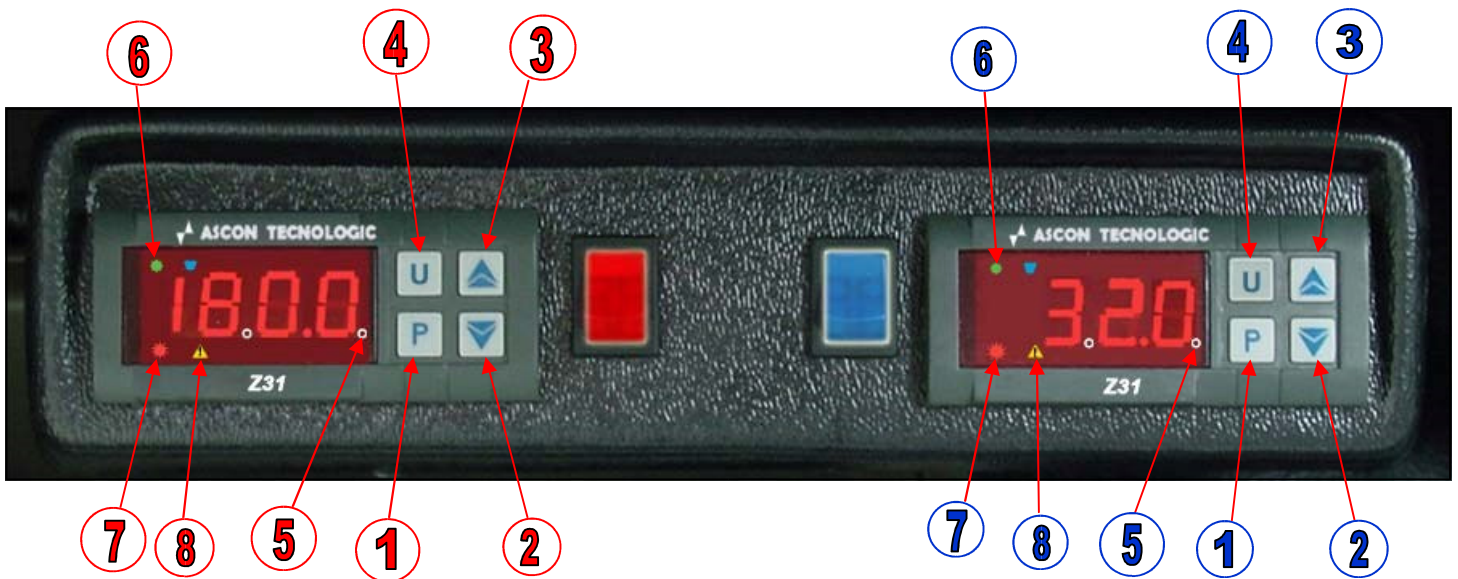
COLOR CODE GUIDE FOR WIRING TO DIGITAL TERMINALS

REFRIGERATION



<http://www.ascontecnologic.com/sites/ascontecnologic.com/files/MZ31-ENG02.pdf>

ASCON TECHNOLOGIC CONTROLLER INSTRUCTIONS FOR OVEN—Z-31



PROGRAMMING OVEN SET-POINT

1. Press key **P (1)** and **HOLD**, until **RED** light appears.
2. Use arrows **(3)** UP or **(2)** DOWN until **i.uP** displays.
3. Press **P (1)**, then arrow UP or DOWN until **oF** displays.
4. Press **P (1)**, then arrow UP or DOWN until **r.HC** displays.
5. Press **P (1)**, then arrow UP or DOWN until **H** displays.
6. Press **P (1)**, then arrow UP or DOWN until **SP** displays.
7. Press **P (1)**, then arrow UP or DOWN until **199.0°** displays.
8. Press **P (1)**, then arrow UP or DOWN until **S.HS** displays.
9. Press **P (1)**, then arrow UP or DOWN until **199.0°** displays.
10. Press **P (1)**, then arrow UP or DOWN until **S.LS** displays.
11. Press **P (1)**, then arrow UP or DOWN until **150.0** displays.
12. Press **P (1)**, then arrow UP or DOWN until **r.d** displays.
13. Press **P (1)**, then arrow UP or DOWN until **5.0** displays.
14. **EXIT** from the Set Programming mode occurs **AUTOMATICALLY** by not pressing any key for 5 seconds, thus the temperature process value will again be displayed.

NOTE:

Press and Hold key (approximately 5 seconds) in step #1 only, All other steps press and release.

Delivery Concepts pre-sets all oven controllers at 199.0° degrees min/185 degrees max setting with +5 differential unless specified otherwise.

GUIDE TO NUMBERS ON DIGITAL CONTROL (RED & BLUE)

1. **KEY P** : Used for the set point setting and to program the functioning parameters.
2. **KEY DOWN** : Used to decrease the values to be set and for selecting parameters.
3. **KEY UP** : Used to increase values to be set or to select parameters.
4. **KEY U** : Press for 2 seconds to exit programming.
5. **LED Set** : Indicates the input in programming mode and the programming level of the parameters.
6. **LED OUT - COOL** Indicates the control output status (compressor or the temperature control device) when the instrument is programmed for cooling operation; on (on), off (off) or inhibited (flashing).
7. **LED OUT - HEAT**: Indicates the control output status (compressor or the temperature control device) when the instrument is programmed for heating operation; on (on), off (off) or inhibited (flashing).
8. **LED ALARM**: Indicates alarm status on (on), off (off) or silenced (flashing)

ASCON TECNOLOGIC CONTROLLER INSTRUCTIONS FOR OVEN—Z-31

Programmable Parameters Table

Here below is a description of the pertinent parameters for oven operation.

Parameter	Description	Range	Def.	Note	
<i>S - parameters relative to Set Point</i>					
1	S.HS	Maximum Set Point	LS ÷ 999	199	(#V)
2	S.LS	Minimum Set Point	99.9/HS	150	(#V)
3	SP	Set Point	LS ÷ HS	199	(#V)
<i>i. - parameters relative to input</i>					
4	i.SE	Probe Type	Pt / nt	Pt	
5	i.uP	Unit of measurement and resolution (decimal point) CO = °C with 1 °res FO = °F with 1 °res C1 = °C with 0.1 °res F1 = °F with 0.1 °res	CO / FO / C1 / F1	FO	
<i>r. - parameters relative to temperature control</i>					
8	r.d	Differential (<i>Hysteresis</i>)	0.0 ÷ 30.0 °C/°F	5.0	(#V)
11	r.HC	Output operating mode H= Heating C= Cooling	HEAT -COOL	HEAT	(#V)

Problems, Maintenance and Warranty

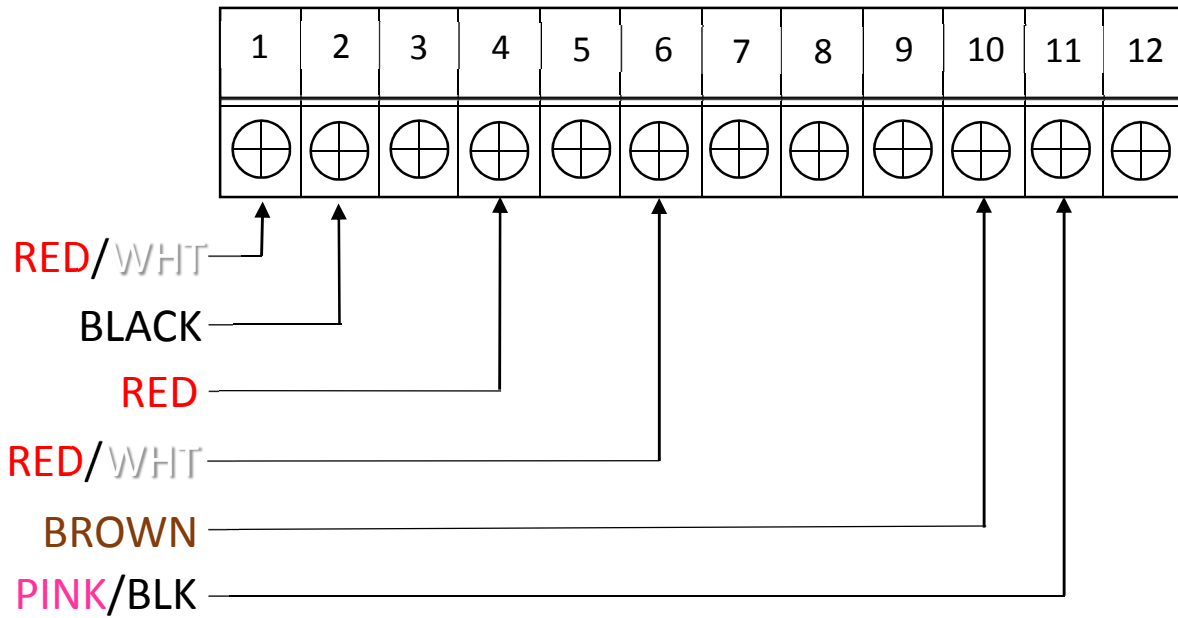
Error Signaling

Error	Reason	Action
E1 -E1	The probe may be interrupted (E) or in short circuit (-E), or may measure a value outside the range allowed	Check the correct connection of the probe with the instrument and check that the probe works correctly.
EPr	Internal EEPROM error	Press key P
err	Fatal Memory error	Replace the instrument

ASCON TECHNOLOGIC CONTROLLER INSTRUCTIONS FOR OVEN—Z-31

COLOR CODE GUIDE FOR WIRING TO DIGITAL TERMINALS

OVEN



<http://www.ascontecnologic.com/sites/ascontecnologic.com/files/MZ31-ENG02.pdf>