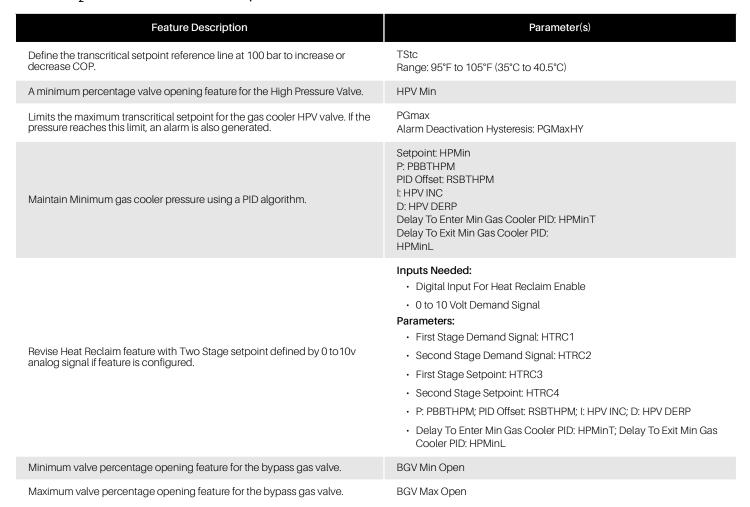# High Pressure CO$_2$ Controller

Update Advisory App Version 160526

With the new release firmware version of HP CO$_2$ Controller 160526 of the High Pressure CO$_2$ Controller, a revised E2 .DSC file (P/N 5270396 ver11) will need to be loaded for proper communication of the updated information.

What's new in the High Pressure CO$_2$ Controller firmware:

Table 1: CO$_2$ Feature and Parameter Description Matrix

Feature Description	Parameter(s)
Define the transcritical setpoint reference line at 100 bar to increase or decrease COP.	TStc Range: 95°F to 105°F (35°C to 40.5°C)
A minimum percentage valve opening feature for the High Pressure Valve.	HPV Min
Limits the maximum transcritical setpoint for the gas cooler HPV valve. If the pressure reaches this limit, an alarm is also generated.	PGmax Alarm Deactivation Hysteresis: PGMaxHY
Maintain Minimum gas cooler pressure using a PID algorithm.	Setpoint: HPMin P: PBBTHPM PID Offset: RSBTHPM I: HPV INC D: HPV DERP Delay To Enter Min Gas Cooler PID: HPMinT Delay To Exit Min Gas Cooler PID: HPMinL
Revise Heat Reclaim feature with Two Stage setpoint defined by 0 to10v analog signal if feature is configured.	**Inputs Needed:** • Digital Input For Heat Reclaim Enable • 0 to 10 Volt Demand Signal **Parameters:** • First Stage Demand Signal: HTRC1 • Second Stage Demand Signal: HTRC2 • First Stage Setpoint: HTRC3 • Second Stage Setpoint: HTRC4 • P: PBBTHPM; PID Offset: RSBTHPM; I: HPV INC; D: HPV DERP • Delay To Enter Min Gas Cooler PID: HPMinT; Delay To Exit Min Gas Cooler PID: HPMinL
Minimum valve percentage opening feature for the bypass gas valve.	BGV Min Open
Maximum valve percentage opening feature for the bypass gas valve.	BGV Max Open

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Table 1: CO$_2$ Feature and Parameter Description Matrix

Receiver pre-alarm to close bypass gas valve before high pressure receiver alarm is reached.	HSPA
Reference alarm for when the system is operating out of gas cooler condition.	RefD; RefT
Bypass gas valve fail valve% for probe fail and high receiver pressure alarm are separate.	BGV% P2Fail; BGV% Open Fail
Receiver pressure Transducer Probe P2 separate configuration.	P2 Xducer Low; P2 Xducer High
Perform separate valve override for HPV and BGV.	HPV Parameters: HPV Override; HPV OvrdTime; VALVE 1 OVR BGV Parameters: BGV Override; BGV OvrdTime; VALVE 2 OVR

For more information on these updates, scan the QR code to access the latest user guide:

Visit our website at **copeland.com/en-us/products/controls-monitoring-systems** for the latest technical documentation and updates.

For Technical Support call **833-409-7505** or email **ColdChain.TechnicalServices@Copeland.com**

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