

# LCR-8-G2 Optional Accessories & Replacement Parts

**Rack-Mount Version** 



Free-Standing Version



### **Optional Accessories**





In-line filter cartridge to filter process water and protect water pump. Filter has molded 3/8" FPT fittings at each end and (gty 2) 3/8" MPT x 3/8" Tube Push-to-Connect fittings. Filter limited to 1-1/2 GPM max flow.

Optional DI Assembly Model: DI-5-3/8-SS



Option includes a nickel brazed plate heat exchanger, rear-panelmounted DI assembly, upgraded stainless steel water fittings, and cartridge style water filter. Includes service wrench.

Optional DI Assembly w/ Bracket Model: DI-5-3/8-BRKT



Same as DI-5-3/8-SS with optional bracket for remote mounting. No stainless steel fittings included. Includes service wrench.

Optional Coolant Filter Assembly Model: FILT-5-3/8-B



Canister style filter cartridge to filter process water and protect water pump. This option includes a back-panel-mounted particle filter assembly comprised of a canister style filter w/ fittings for installation onto chiller back panel, and a spare replacement filter element (P5-478). Includes service wrench.

Optional Coolant Filter Assembly Model: FILT-5-3/8-BRKT

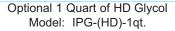


Same as FILT-5-3/8 with optional bracket for remote mounting. No brass fittings included. Includes service wrench.

Optional DI Assembly w/o Cartridge Model: DI-LCR-SS

Same as DI-5-3/8-SS less ion cartridge assembly.

### **Optional Accessories**





Commonly called HD IPG. One quart bottle. DOWFROST HD fluid features a higher maximum operating temperature, higher reserve alkalinity and greater thermal stability for longer fluid life. Extra-strength corrosion inhibitors in DOWFROST HD fluid are formulated for high temperature use, resulting in reduced maintenance and longer inhibitor life in most applications.

Optional 1 Gallon of HD Glycol Model: IPG-(HD)-1gal.



Commonly called HD IPG. One gallon bottle. DOWFROST HD fluid features a higher maximum operating temperature, higher reserve alkalinity and greater thermal stability for longer fluid life. Extra-strength corrosion inhibitors in DOWFROST HD fluid are formulated for high temperature use, resulting in reduced maintenance and longer inhibitor life in most applications.

## Optional 1 Gallon of Mixed HD Glycol Model: IPG-(HD)-30/70-1gal.



Commonly called HD IPG. One gallon bottle. Pre-mixed coolant with 30% IPG & 70% deionized water. DOWFROST HD fluid features a higher maximum operating temperature, higher reserve alkalinity and greater thermal stability for longer fluid life. Extra-strength corrosion inhibitors in DOWFROST HD fluid are formulated for high temperature use, resulting in reduced maintenance and longer inhibitor life in most applications.

### **Optional Accessories**

Optional Modbus RTU Communication Model: 485 or 232-MODBUS RTU



Option provides communications via the digital temperature controller. Modbus RTU / RS-485 or 232 format allows for communications via external computer or network. A Modbus Gateway or Modbus RTU communications card is required for interface.

Optional Modbus TCP Communication

Model: TCP



Option provides communications via the digital temperature controller. Modbus TCP / Ethernet format allows for communications via network computer. This format is supplied via rear panel CAT 6 female port.

Optional USB 2.0 Communication Model: USB2.0



Option provides communication via the digital temperature controller. USB 2.0 format allows communications via local computer. This format is supplied via rear-panel USB B female connector.

Optional RS-232 Communication Model: RS-232



Option provides communications via the digital temperature controller. EIA-232 format allows for communications via local computer. EIA-485 is output from the temperature controller & converted via external cable / module to a RS-232 format.

Optional Profibus DP Communication Model: PROFIBUS DP



Option provides communications via the digital temperature controller. Profibus DP format allows for communications via external computer or network. A Profibus Gateway or Profibus communications card is required for interface.

Optional Device Net Communication Model: DEVICE NET



Option provides communications via the digital temperature controller. Device Net format allows for communications via external computer or network. A Device Net Gateway or Device Net communications card is required for interface. Cable 3082A supplied and routed to optional communications panel. Customer must supply connector.

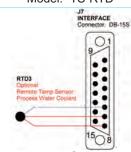
### **Optional Accessories**

Optional End User Board Model: EU-PCB-A or S



Front-panel viewed PCB reports status of interface signals via LED's and audible alarm. PCB reports status of coolant flow, coolant level, compressor alarm, and coolant temperature alarm via dual color LED's. Audible alarm sounds on any or all fault signals. Order option "A" for alarms only or option "S" for alarms and shut down.

Optional RTD Output Model: TS-RTD



Sensor is 100Ω, 3 wire platinum RTD & located in coolant tank. Connector output located on back panel w/ mating connector provided. Sensor provides redundant sensing of coolant temperature.

Optional Remote Energize Model: SSR-REMOTE-V



Option allows user to power chiller ON or OFF via internally installed SSR. Customer supplies remote 3-32 VDC input to energize chiller.

Optional Remote Energize Model: SSR-REMOTE-C



Optional SSR-Remote-C provides user independent remote energize capability for "PUMP" & "COOL" switch functions via two contact closures to 15 pin D-Sub "INTERFACE" connector.

### **Optional Accessories**

Optional DIO (Digital In/Out)
Model: DIO-LCR-1420



Optional includes two digital outputs from the temperature controller. Outputs provide status of process coolant flow and coolant level switches via data stream.

Optional DIO Contact Closures
Model: DIO-LCR-1420-V



Option provides DIO (Digital Input/Output) signals (24 VDC switched voltage typical per signal / 750mW per contact) to the 15 pin D connector via the End User Board conversion. DIO's are used to energize devices such as buzzers, horns, cameras, and lights.

Optional DIO Contact Closures Model: DIO-LCR-1420-C

DIO signals are output to the 15 pin D connector as contact closures.

Optional Operator Terminal Model: OT-7 or OT-10



With the remote touch-screen operator terminal you can monitor Time vs. Temperature via a chart, view Analog Input as a bar graph, monitor the position of the valve / amount of cool power via a meter and animation, change analog input calibration offset and set point, monitor DIO values, and initiate a user restore via drop down menu.

Package Includes: 7" or 10" Silver Series Interface, Power Supply, Input: 85-264VAC, Output: 24VDC, 1.1A, 25W, 5-foot communication cable OIT COM1 (2-wire RS-485) to 9 Pin Sub D Male Connector w/ Shell, Pre-Installed Protective Screen, and Resistive Stylus

OIT-7 and OIT-10 are both 800 x 480 dpi. OIT-7 16 million colors / OIT-10 262 thousand colors OIT-7 and OIT-10 are 4 wire analog resistive screens. OIT-7: 7.88W x 5.76H x 1.34D in.

OIT-10: 10.67W x 8.38H x 1.57D in.

Optional SpecView Software (Mini Version)

Model: SVMSB-0000-0000

### SPECVIEW



SpecView gives customers the ability to remotely set the set point, see temperature alarms, monitor time vs. temperature, and monitor the state of the RTD. Also includes Color Dynamics and Strategy Controller Option which allows a color to change colors and flash. With added DIO controller option SpecView can monitor flow and level alarms. Watlow's Controller Support Tools come with latest SpecView program. Customers can use software up to 10 minutes in demo mode. Purchase this option directly from Watlow. Single Port Option.

Optional SpecView Software (Mini + Active X)

Model: SVMSB-0A00-0000

### SPECVIEW



Same as SVMSB-0000-0000 and also includes graphical Active X controls that allow SpecView to connect to and work with third party software, such as FactorySoft's Symbol Factory. Purchase this option directly from Watlow. Single port option.

### **Optional Accessories**



Upgraded stainless steel, 37 degree JIC coolant fittings, braided Teflon hoses, stainless steel flow switch, and digital pressure gauge supplied.



Includes two 3/8" Push-to-Connect fittings for chiller back-panel & 12 feet of 3/8" OD LLDPE tubing (BLK).

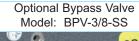


Option provides casters (4X) and mounting hardware for portability, until unit is ready for rack mounting.





Option converts rack-mount cabinet to free standing chiller w/ casters.





Back-panel mounted stainless steel valve body and valve allows process coolant, to be bypassed between the supply and return bulkhead fittings. Valve regulates coolant flow to load.

Optional Bypass Valve (Push to Connect)

Model: BPV-3/8-SS-PC



Same as BPV-3/8-SS with (qty 2) external 3/8" O.D. x 3/8" MPT push-to-connect tube fittings.

### **Optional Accessories**





Same as BPV-3/8-SS with Quick-Disconnect external fittings. Includes male and female valved, quick-disconnect fittings. Also includes mating quick disconnect fitting w/ 3/8" compression connections to customer tubing. See Model 3/8-QD option.

Optional Isolation Transformer Model: IT-650



Selectable mains transformer upgrade. Transformer provides electrical isolation for patient contact applications.

Optional Quick Disconnect Fitting Kit Model: 3/8-QD



Option provides male and female valved, quick-disconnect fittings. Also includes mating quick-disconnect fitting w/ 3/8" compression connections to customer tubing.

Optional PAO Compatibility & Test Model: PAO-C/T



PAO Compatibility & Test
Option includes custom seals
& materials for PAO coolant.
Includes upgraded,
high-pressure plumbing, chiller
testing with MIL-PRF-87252C,
PAO coolant, digital coolant
pressure gauge assembly,
stainless steel, 37 degree JIC
coolant fittings, and braided
Teflon hoses.

Optional Filter / Flow Meter Assembly

Model: PAO-FF



Option includes fuel filter / water separator assembly with a spare filter element, and a 0-8 GPM digital coolant flow sensor. The digital flow sensor is not in contact with the coolant and operates over a greater range. Percent of Full Scale with response time of 0.5sec is 2.0%. Assembly is mounted on a separate rack panel. Assembly is plumbed to the chiller if the unit is not free-standing.

Optional Filter Assembly Model: PAO-FILT



Option includes fuel filter with a spare filter element. Assembly is mounted on a separate rack panel.

### **Optional Accessories**

Optional Insulation Package Model: INSUL-PKG-LCR

For applications where coolant set temperature is below dew point. Insulation applied to process coolant tank, pump, pump head, and coolant lines. Pump motor is encapsulated to protect armature.

Optional High Temp Package Model: HT-55

Option for model LCR-8 only. Provides extended chiller coolant temperature operation to 55°C. Option reduces chiller capacity from 800 watts to 650 watts @ 20°C supply water.

Optional RD Pump Model: NRD-08TV-24

Optional centrifugal water pump for low pressure applications. Includes 30 watt 24 VDC power supply and plumbing. Deadhead pressure @ 16psi. Supplies 0.5 - 1.5 GPM (1.9 - 5.7 LPM) of water flow, depending on system pressure.

Optional Rack-Mount Conversion Model: RMC-LCR

Option for customers with free standing LCR-2/4/8's that want to convert their unit to a rack-mount unit. Includes 1 top panel, 2 rack mount ears, and hardware.

Optional Cable Assembly, Series Interface Model: CBL-SER-INT



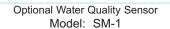
Optional 15pin D interface signal cable to provide interlock outputs, RTD output & remote energize input.

Optional Cable Assembly, Interface Model: CBL-INT



Optional 15pin D interface signal cable to provide interlock outputs, RTD output & remote energize input.

### **Optional Accessories**





Includes water quality monitor w/ probe and tee fitting for quality check.

Optional Push-to-Connect Fittings
Model: P-C-3/8



Includes two 3/8" Push-to-Connect fittings for chiller back-panel. Optional Digital Pressure Gauge Model: DPG



The transducer operates from 0-145psi and has a 0.25% BFSL accuracy rating. The transducer has all stainless steel parts with no o-rings. The controller displays "inrange" pressure values in green and "out-of-range" pressure values in red.

Optional Elapsed Time Meter Model: ETM

Non Resettable Elapsed
Time Meter with internal 8
year battery. Meter is
mounted on the back panel.
Meter uses vibration to log
chiller run-time for
maintenance schedule.

Optional JIC 9/16"-18 Fittings Model: JIC-3/8



Includes two stainless steel 3/8" NPT to JIC fittings for chiller back panel coolant supply and return.

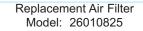
Optional Coated Condenser Coil

Model: CCC

Option provides coating to protect condenser coil from harsh ambient air environment.

# CHILLER MODULE REPLACEMENTS K-O Concepts Model LCR-G2 (-8)

### **Replacement Parts**





Filters ambient air to maintain efficiency of condenser coil.

Replacement DI Cartridge Model: SB-0500



Replacement mixed-bed ion cartridge for deionizer canister.

Replacement Filter Element Model: P5-478



Replacement 5 micron filter element for FILT-5 assembly.

Replacement Fan Model: LCR-AXIAL FAN



Optional replacement fan for LCR-G2 units.

Replacement 0-30psi Gauge Brass Model: 0-30-B



Replacement 0-30psi pressure gauge. Gauge is 316 stainless steel and connection fittings are brass.

Replacement 0-160psi Gauge Brass Model: 0-160-B



Replacement 0-160psi pressure gauge. Gauge is 316 stainless steel and connection fittings are brass.

# CHILLER MODULE REPLACEMENTS K-O Concepts Model LCR-G2 (-8)

### **Replacement Parts**

Replacement 0-30psi Gauge Model: 0-30-SS



Replacement 0-30psi pressure gauge. Gauge & connection fittings are 316 stainless steel.

Replacement 0-160psi Gauge SS Model: 0-160-SS



Replacement 0-160psi pressure gauge. Gauge & connection fittings are 316 stainless steel.

Replacement PDM Pump Model: PDM-3-10-LCR Replacement PDM pump with fittings.

Replacement Encapsulated PDM Pump Model: PDM-E-3-10-LCR

Replacement encapsulated PDM pump for units with a insulation package. Comes with insulation around pump head.

Replacement RD Pump
Model: NRD-08TV-24-LCR
Replacement centrifugal
water pump. Includes 30
watt 24 VDC power supply
and plumbing.

Replacement Pump Controller 115V Model: CONT-115V

Pump controller replacement for 115V LCR's.

# CHILLER MODULE REPLACEMENTS K-O Concepts Model LCR-G2 (-8)

### **Replacement Parts**

Replacement Pump Controller 230V Model: CONT-230V

Pump controller replacement for 230V LCR's.

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