

10G79B, 10G711B and 10G711C HOT GAS DEFROST
22, 134a, 404A, 507

Application

Hot gas defrost valves are utilized in systems in which one or more compressors provide refrigeration to multiple refrigerated cases, both medium and low temperature. The 3-way valves are used to control the flow of gas off a discharge header to the various cases (defrost) or suction gas from the cases to the suction header (refrigeration). The direction of flow is dependent upon whether the pilot valve coil is energized or de-energized. These 3-way valves are used for gas defrost only.



energized the piston and seat assembly shifts to close the suction port and open the discharge gas port, to allow hot gas to flow from the discharge header through the valve to the evaporator outlet.

Due to the fact that when de-energized the valves remain closed to the hot gas connection, these can only be applied off a discharge header and not in the main discharge line.

Installation and Service

The 10G79B, 10G711B and 10G711C may be installed either upright or on its side. However, it should not be mounted with the coil housing below the valve body. The valve can be soldered in place without disassembly, but the body must be kept cool to avoid damage to the Nylatron synthetic seating material. Body and connections should be wrapped in a wet cloth. The valves may be easily disassembled without unsweating connections.

Specifications

TYPE	CONNECTIONS ODF SOLDER Inches			MOPD* AC bar	MRP** bar	STANDARD COIL RATINGS			
	DISCHARGE	SUCTION	EVAPORATOR			VOLTS/CYCLES	WATTS	COIL	
10G79B	7/8	1-1/8	1-1/8	20.6	34.4	24/50-60	10	MKC-1	
10G711B		1-3/8	120/50-60						
10G711C			208-240/50-60 120-208-240/50-60						

* MOPD stands for Maximum Operating Pressure Differential.
 ** MRP stands for Maximum Rated Pressure.
 Not available for R-410A.
 ■ Available with conduit boss, junction box, or DIN at no extra charge.
 ■ Dual voltage 4-wire coils, 120-208-240/50-60 are available at slight additional cost.
 For other voltages and cycles, consult your nearest Sporlan Wholesaler or email europesold@parker.com

Evaporator Capacities kW • bar • °C

EVAPORATOR TEMPERATURE °C	PRESSURE DROP ACROSS THE VALVE ΔP – bar							
	0.03				0.07			
	22	134a	404A	507	22	134a	404A	507
-5	19.6	14.7	16.5	16.2	29.5	22.1	24.8	24.3
-10	17.7	13.0	14.7	14.4	26.6	19.6	22.1	21.7
-15	15.9	11.5	13.0	12.8	23.9	17.3	19.6	19.3
-20	14.3	10.1	11.5	11.3	21.5	15.2	17.3	17.0
-25	12.7	8.87	10.1	9.98	19.2	13.3	15.2	15.0
-30	11.3	7.72	8.87	8.74	17.1	11.6	13.3	13.2
-35	10.0	6.69	7.72	7.62	15.1	10.1	11.6	11.5
-40	8.83	5.76	6.68	6.60	13.3	8.66	10.0	9.93

Capacities are based on 38°C condensing temperature isentropic compression plus 28°C, evaporator temperature as shown plus 14°C superheat suction gas. For capacities at other conditions, use the Sporlan Selection Program or email europesold@parker.com. All capacity ratings are in accordance with ARI Standard No. 760-80.

Valve Nomenclature/Ordering Instructions

When ordering complete valves, specify Valve Type, Voltage and Cycles. When ordering Valve Body ONLY, specify Valve Type. When ordering Coil Assembly ONLY, specify Coil Type, Voltage and Cycles. **Example: MKC-1 120/50-60.**

MKC	1	120	/ 50-60
Coil Type	Size	Voltage	Cycles

