



i-Vu® Building Automation System

SMART VALVES AND SMART DAMPER ACTUATORS



Carrier's smart valves and damper actuators integrate seamlessly with the controller's Act Net port. Act Net provides easy addressing for quick startup and installation times while saving onboard I/O. Smart valves feature CCV™ (Characterized Control Valves) technology ensuring precise flow and energy efficiency across various temperatures. Smart damper actuators use Multi-Function Technology (MFT) for precise damper control and efficiency.

Key Features and Benefits

- Smart devices support serial communications for precise valve / damper position management without consuming physical I/O on the controller
- Connect up to 8 smart devices directly to the actuator sub-network (Act Net) bus on any Carrier TruVu controller, reducing wiring complexity and installation time
- Exact position feedback provided to the TruVu controller for diagnostic purposes
- Act Net Auto-address configuration provides quick installation
- Smart Valve Selector Tool allows for faster product selection
- Ideal for AHUs, heating and cooling coils, FCUs, unit ventilators and VAV re-heat coils
- Supports analog (2-10V) connections

Smart Valves

- 2-way or 3-way valve and actuator combination options
- Product ranges from 1/2" to 6" (15 mm to 150 mm) nominal valve sizes
- Product ranges from nominal valve sizes
- Fail-Safe (NO/NC) and Non-Fail-Safe (NO, fail open/ NO, fail closed and NC, fail open/NC, fail closed) rotary actuator types
- Multiple CV product options
- NPT connections on 1/2" to 3" (15 mm to 80 mm) valve sizes, ANSI 125, 250 flanges on 4" to 6" (100 mm to 150 mm) valve sizes

Smart Damper Actuators

- 35 in-lb to 360 in-lb (4 Nm to 40 Nm) to actuator torque ranges¹
- 24 VAC / VDC external power supply
- Quick running, clear position indication, and manual override

¹depends on actuator size and model



SMART VALVES AND DAMPER ACTUATORS



MODEL OPTIONS

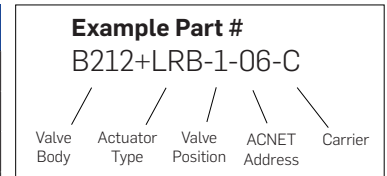
Damper Actuators

Actuator Type	Part Number	Safeties	Type	Torque
LF	LF24-MFT-06-C	Fail Safe	Spring Return	35 in-lb (4 Nm)
LMB	LMB24-MFT-06-C	Non-Fail Safe	Non-Spring Return	45 in-lb (5 Nm)
AFB	AFB24-MFT-06-C	Fail Safe	Spring Return	180 in-lb (20 Nm)
AMB	AMB24-MFT-06-C	Non-Fail Safe	Non-Spring Return	180 in-lb (20 Nm)
GKB	GKB24-MFT-06-C	Fail Safe	Electronic	360 in-lb (40 Nm)
GMB	GMB24-MFT-06-C	Non-Fail Safe	Non-Spring Return	360 in-lb (40 Nm)

Valve Actuators

Actuator Type	Part Number	Safeties	Type
TFRB	TFRB24-MFT-06-C	Fail Safe	Spring Return
LF	LF24-MFT-06-C	Fail Safe	Spring Return
AFRB	AFRB24-MFT-06-C	Fail Safe	Spring Return
GKRB	GKRB24-MFT-06-C	Fail Safe	Electronic
LRB	LRB24-MFT-06-C	Non-Fail Safe	Non-Spring Return
ARB	ARB24-MFT-06-C	Non-Fail Safe	Non-Spring Return
GRB	GRB24-MFT-06-C	Non-Fail Safe	Non-Spring Return

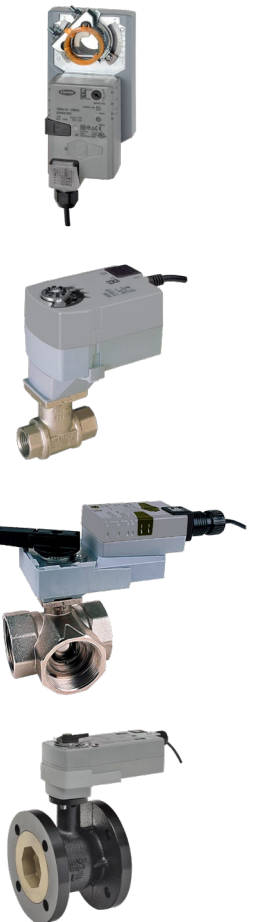
Valve Position Options
1 NO/FO
2 NO/FC
3 NC/FO
6 NC/FC



Valves

2-Way Valve Model	Valve Size (" / mm DN)	C _v Max	LRB	TFRB	LF	AFRB	ARB	GKRB	GRB
B207-B216	1/2"	15	0.3-16	X	X	-	-	-	-
B217-B220	3/4"	20	4.7-14	X	X	-	-	-	-
B221	3/4"	20	24	X	-	X	-	-	-
B222-B225	1"	25	7.4-30	X	-	X	-	-	-
B229-B230	1-1/4"	32	10-19	X	-	X	-	-	-
B231-B232	1-1/4"	32	25-37	-	-	-	X	X	-
B238-B240	1-1/2"	40	19-37	-	-	-	X	X	-
B248-B254	2"	50	29-240	-	-	-	X	X	-
B261-B265	2-1/2"	65	60-210	-	-	-	X	X	-
B277-B280	3"	80	70-170	-	-	-	X	X	-
B6250	2-1/2"	65	70	-	-	-	X	X	-
B6300	3"	80	110	-	-	-	X	X	-
B6400	4"	100	186	-	-	-	-	X	X
B6500	5"	125	290	-	-	-	-	X	X
B6600	6"	150	400	-	-	-	-	X	X

3-Way Valve Model	Valve Size (" / mm DN)	C _v Max	LRB	TFRB	LF	AFRB	ARB	GKRB	GRB
B307-B316	1/2"	15	0.3-16	X	X	-	-	-	-
B317-B318	3/4"	20	4.7-7.4	X	X	-	-	-	-
B320-B321	3/4"	20	14-24	X	-	X	-	-	-
B322-B325	1"	25	7.4-30	X	-	X	-	-	-
B329-B331	1-1/4"	32	10-25	-	-	-	X	X	-
B338-B341	1-1/2"	40	19-46	-	-	-	X	X	-
B347-B352	2"	50	29-83	-	-	-	X	X	-



For a full list of Smart Valves, please refer to the selection guide on Carrier.com and HVAC Partners.

For more information, contact your local Carrier Controls Expert.

Controls Expert Locator:
www.carrier.com/controls-experts