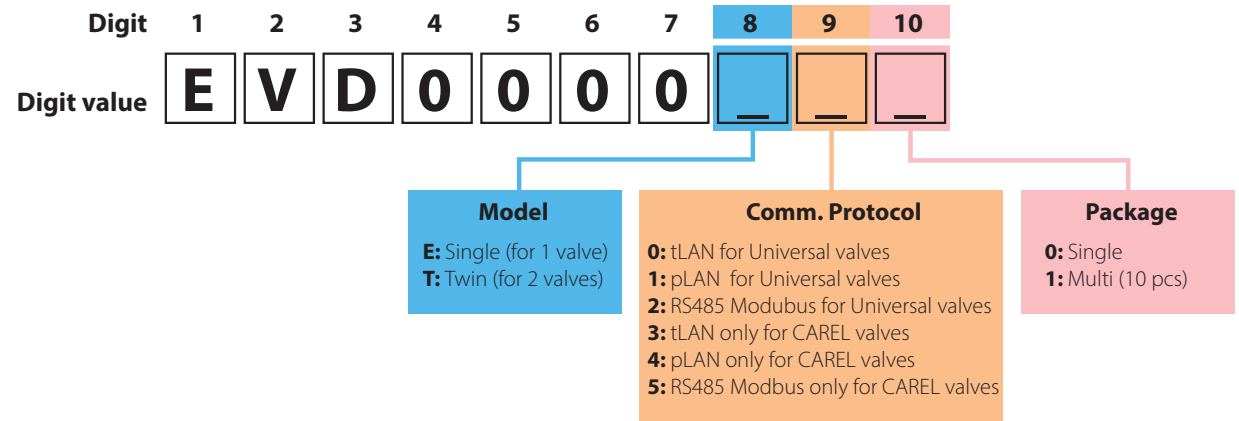


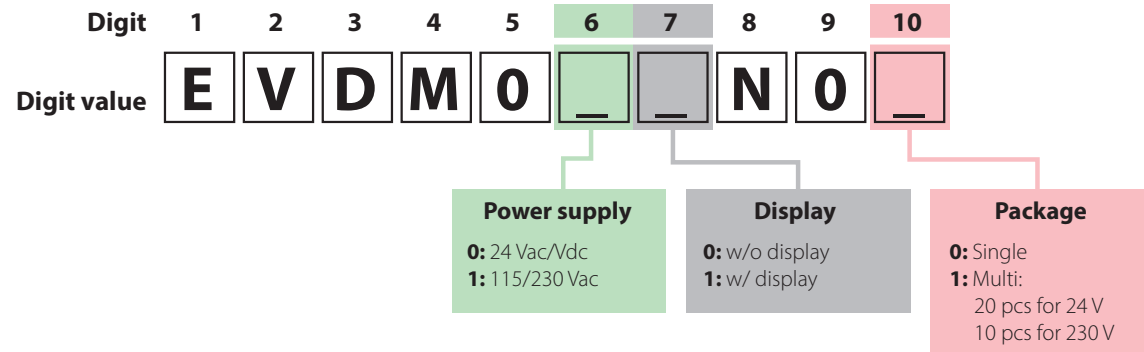
EVD Evolution



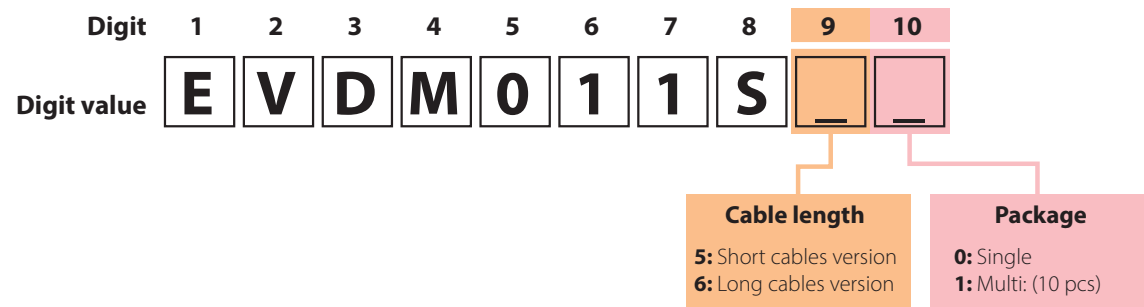
Display is not included with the product.



EVD Mini








EVD Ice






ELECTRONIC EXPANSION VALVES DRIVERS (EVD) | GENERAL OVERVIEW



DRIVERS

					
	EVD Evolution Single	EVD Evolution Twin	EVD Mini		EVD Ice
Display	Optional		with and without Display		with Display
Valves compatibility	All Carel valves and third party (Universal)		Carel E2V or E3V only		Carel E2V or E3V only
Driver type	Bipolar		Unipolar		Unipolar
Power supply	24 Vdc/Vac (+10%/-15%)		24 Vdc/Vac (+10%/-15%)	115/230 Vac (+10%/-15%), 50/60 Hz	115/230 Vac (+10%/-15%), 50/60 Hz
Max power absorption	9.2 ÷ 16.2 W	16.2 W	13 W	15 W	15 W
Transformer	20 ÷ 100VA		20 ÷ 50 VA	-	-
Operating conditions	-25T60°C (with EVDIS*: -20T60°C) <90% rH		-25T60°C <90% rH		-30T40°C <90% rH
Storage conditions	-35T60°C (with EVDIS*: -30T60°C) <90% rH		-35T60°C <90% rH		-35T60°C <90% rH
Communication	tLAN, pLAN, RS485 Modbus	tLAN, pLAN, RS485 Modbus	RS485 Modbus		RS485 Modbus
Index of protection	IP20		IP00		IP65/IP67
Relay	1	2	-		-
Analog Input 1	Pressure transducer: 4...20 mA or Ratiometric		Ratiometric pressure transducer or NTC		Ratiometric pressure transducer
Analog Input 2	NTC or 0-10 V		NTC or 0 to 10 V		NTC (already included)
Analog Input 3	Pressure transducer: 4...20 mA or Ratiometric		-		-
Analog Input 4	NTC		-		-
Dimensions	4DIN, LxHxW = 70x110x60 mm		LxHxW = 88x90x33 mm	4DIN, LxHxW = 70x114x38 mm	LxHxW = 93x230x41 mm
Electrical safety	EN 60730-1, EN 61010-1, UL873, VDE 0631-1		EN 60730-1, UL 60730-1, UL 60730-2-9		EN 60730-1, UL 60730-1, UL 60730-2-9
Electromagnetic compatibility	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN61000-6-4; EN61000-3-2, EN55014-1, EN55014-2, EN61000-3-3		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN61000-3-2, EN55014-1, EN61000-3-3		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN61000-3-2, EN55014-1, EN61000-3-3
Flammable refrigerants	Compliance with standard IEC 60335-2-40:2018 (for A2L refrigerants)		Compliance with standard IEC 60335-2-40:2018 (for A2L refrigerants)		Compliance with standard IEC 60335-2-40:2018 (for A2L refrigerants)
Product page link	EVD Evolution Single	EVD Evolution Twin	EVD Mini		EVD Ice

ULTRACAP MODULES

			
	Ultracap Module for EVD Evolution	Ultracap Module for EVD Mini	Ultracap Module for EVD Ice
Ultracap Code (single pack)	EVD0000UC0	EVDMU00N00	EVDMU00R10
Charge time	4 minutes for two Carel valves; 5 minutes for two third party valves	4 minutes for one Carel valve	4 minutes for one Carel valve
Maximum output voltage	18.4 V	12 Vdc ± 15%	12 Vdc ± 15%
Charge power supply	24 Vac/Vdc ± 15 %, in parallel to EVD	13 Vdc ± 10 %	13 Vdc ± 10 %
Max power absorption	10 VA (while charging)	Included in the driver power absorption	Included in the driver power absorption
Operating conditions	-25T60°C <90% rH	-30T60°C <90% rH	-30T60°C <90% rH
Storage conditions	-40T85°C <90% rH	-35T60°C <90% rH	-35T60°C <90% rH
Front panel protection	IP20	IP00	IP65/IP67
Electrical safety	EN 60730-1; UL 60730-1	EN 60730-1; UL 60730-1; UL 60730-2-9	EN 60730-1; UL 60730-1; UL 60730-2-9
Electromagnetic compatibility	EN 61000-6-1; EN 61000-6-2; EN 61000-6-2/EC; EN 61000-6-3; EN 61000-6-4	EN 61000-6-1; EN 61000-6-2; EN61000-6-3; EN 61000-6-4; EN 61000-3-2; EN 55014-1; EN 61000-3-3	EN 61000-6-1; EN 61000-6-2; EN61000-6-3; EN 61000-6-4; EN 61000-3-2; EN 55014-1; EN 61000-3-3
Flammable refrigerants	Compliance with standard IEC 60335-2-40:2018 (for A2L refrigerants)	Compliance with standard IEC 60335-2-40:2018 (for A2L refrigerants)	Compliance with standard IEC 60335-2-40:2018 (for A2L refrigerants)
Dimensions	4DIN, LxHxW = 70x110x60	LxHxW = 98x61x55	LxHxW = 98x75x55
Technical leaflet link	Ultracap Module for EVD Evolution	Ultracap Module for EVD Mini	Ultracap Module for EVD Ice

For further details see products Technical Leaflets and Manuals available on our website or contact us at carel@carel.com.

VALVES STATORS CONNECTIONS TO EVD

EEV Family	Code	EVD Evolution	EVD Ice	EVD Mini	Length [m]
E2V	E2VSTA037*			✓	0.7
	E2VSTA031*			✓	1
	E2VSTA032*			✓	2
	E2VSTAS31*			✓	1
	E2VSTAS32*			✓	2
	E2VSTAS22*	✓			2
	E2VSTAX31*			✓	1
	E2VSTAX32*			✓	2
	E2VSTAX3T*			✓	3
	E2VSTAX21*	✓			1
	E2VSTAX2T*	✓			3
	E2VSTA033*			✓	0.3
	E2VSTAS33*			✓	0.3
	E2VSTAS23*	✓			0.3
	E2VSTA020*	✓			-
	E3V	E3VSTA031*			✓
E3VSTA032*				✓	2
E3VSTA033*			✓		0.3
E3VSTA035*			✓		0.5
E3VSTA020*		✓			-
E4V&E7V	E4VE7VSTA*	✓			-
E5V&E6V	E5VE6VSTA*	✓			-

CABLES OR EXTENSIONS for EVD

Code	EVD Evolution	Length [m]
E2VCABS310	✓	3
E2VCABS610	✓	6
E2VCABS910	✓	9
E2VCAB0300	✓	3
E2VCAB0600	✓	6
E2VCAB0900	✓	9
E2VCABS300	✓	3
E2VCABS600	✓	6
E2VCABS900	✓	9
E2VCABSA50	✓	15

Programming keys and accessories

Code	Function
CVSTDUMOR0	USB - RS485 converter
EVDNCNV00E0	USB - tLAN converter
0907858AXX	Ferrite for valve cables

NTC & PRESSURE TRANSDUCERS COMPATIBILITY

Sensor type	Generic information		EVD Evolution	EVD Ice	EVD Mini
NTC	standard	10 kΩ β 3435	✓	*	✓
	high temperature	50 kΩ β 3977	✓		
	low temperature	750 Ω β 3969	✓		
Pressure Transducer	Ratiometric		✓	✓	✓
	4...20 mA		✓		

* already included

Display for EVD Evolution (optional)

Language	Code
English	EVDIS00ENO
Italian	EVDIS00ITO
German	EVDIS00DE0
French	EVDIS00FRO
Spanish	EVDIS00ESO
Portuguese	EVDIS00PTO
Chinese	EVDIS00CNO
Japanese	EVDIS00JPO
Russian	EVDIS00RU0
Czech	EVDIS00CZ0
Swedish	EVDIS00SE0
Polish	EVDIS00PLO

For further details on cable length compatibility please refer to the EVD technical leaflet or manual.

RECOMMENDED AWG CABLES for EVD EVOLUTION

Cable length [m]	9*	15*	20 - 30	30 - 50
AWG	22	20	18	14

* already present in Carel portfolio, see table above: "CABLES OR EXTENSIONS for EVD"

ADDITIONAL DOCUMENTATION

Valves	General catalogue for info on valves, cables and accessories:	Link
Sensors	Main page for NTC, Pressure transducers and other sensors:	Link
EVD	Guide for the parametrization via the VPM software:	Link
Selection tool	For valve and sensors selection:	Link



EVDIS00xxx



CVSTDUMOR0



EVDNCNV00E0



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For further details see products Technical Leaflets and Manuals available on our website or contact us at carel@carel.com