Multi-axis controller V24





The association drive V24 is designed as a driving joystick for construction and agricultural machinery. It has a parking position which can be inserted in the zero position. The V24 is characterized by its extremely rugged design. Through it's various interfaces and the many possibilities of combination with our numerous ball handles the V24 is very flexible.

Technical data

Mechanical life V24 Supply voltage Operation temperature Storage temperature Degree of protection Functional safety 20 million operating cycles See interface -40°C to +60°C -50°C to +80°C IP54, electronic assembly IP67 PLd (EN ISO 13849) possible

			Example					
		V24	P1	т	- R	- E	- S	- X
Basic				-				
V24.1	Multi-axis controller, 1-axis							
V24.1	Multi-axis controller, 1-axis with parking position left							
V24L	Multi-axis controller, 1-axis parking position right							
VZTIX	Plain axis controller, 1 axis parking position right							
Gate								
P1	T-gate main axis axial (included in basic unit!)							
P2	T-gate main axis right outside							
P3	T-gate main axis left outside							
PX	Special gate							
Grip /	Palm grip							
	Knob (included in basic unit!)							
т	Dead man							
Н	Signal button							
D	Push button							
В	Palm grip B (see page palm grip 147)							
Main a	ixis							
R	Friction brake adjustable (included in basic unit!)							
		I.						
	ace (description see on the following pages)							
E3xx	CAN-interface							
E4xx	CANOpen Safety interface							
	onnectors			_				
S	Standard plug connectors (see page 129)							
Specia	l model							
Х	Special / customer specified							
~								

Multi-axis controller

Combination possibilities with our handles

B3

B5

B2

V24

B1



B10

B14 B15

n 10 p 16 p 13 p 14 p 14 p 14 p 13 p 13 p 13 p 13 p 14 p 14 Ref	l				1	<i>[</i>]				F	
Image: Section of the sectin of the section of the section of the sect		p. 149	p. 151	p. 154	· · · · · · · · · · · · · · · · · · ·		p. 161				
Test Image: Constraint of the second sec	B20	B22	B23	B24	825	B28	B29	830	B31	L	
Supplicite >36V DC Supplicite 20mA Mounting depth A 60m Protocol CANOpen CIA DS 301 or SAE J 1939 Baud rate 60m0 Protocol 25kBit/s to 1Mbit/s Output value 25k.0255 Viring CAN (N) cable 300mm with plug connector M12 (male) CAN UQUT) cable 300mm with plug connector M12 (female) Katerial In-Joutputs cable 300mm log without plug connector CAN V24 Caning postick karis Sale J 1930 1 S digital jostick functions reduce by 7 pieces! Sale 11 - 7 analog jostick karis Sale sternal in-Joutputs cable 300mm (not, 7 external digital inputs) 2 - 1 shigital jostick functions reduce by 7 pieces! 2 3 - 1 shigital cable sternal in-Joutputs z 3 Vith additional external in-Joutput (potentialfree, 100mA), 7 external digital inputs 2 3 - Sternal LED-outputs, 1 witching output (potentialfree, 100mA), 7 external digital inputs 2 3 Vith additional external in-Joutput to the main-axis 2 3 3 Vith additional external in-Joutput (potentialfree, 100mA), 7 external digital inputs 2 3 Vith additinal external in-Jou		p. 169	p. 171	p. 173	p. 175	p. 177	p. 179	p. 181	p. 183		
Mounting depth A60mmProtocolCANOpen CIA DS 301 or SAE J 1939Baud rate125kBit/s to 1Mbit/sOutput value2550255WiringCAN (IN) cable 300mm with plug connector M12 (male) External in-/outputs cable 300mm long without plug connector5CAN (OUT) cable 300mm with plug connector M12 (female) External in-/outputs cable 300mm long without plug connector5CAN V24E312 1- 7 analog joystick axis - 15 digital joystick functions * With the use of external in-/byts, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensorE312 1Vith additional external in-/byts the joystickfunctions reduce by 7 pieces! - 1 fe external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs2- 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs3VUth additional digital outputs for the main-axis - 2 direction signals + 1 zero position signal (potentialfree) per axis3	CAN		9-36V DC	_	_	_	_	_			
ProtocolCANOpen CIA DS 301 or SAE J 1939Baud rate125kBit/s to 1Mbit/sOutput value2550255WiringCAN (IN) cable 300mm with plug connector M12 (male) External in-/outputs cable 300mm long without plug connector5CAN V24Ditional with plug connector (standard plug connectors see page 129)5CAN V24E312 1- 7 analog joystick axis - 15 digital joystick functions * With the use of external in-/utputs, the joystickfunctions reduce by 7 pieces! - 1 nput for capacitive sensorE312 1With additional external in-/utputs, the joystickfunctions reduce by 7 pieces! - 1 nput for capacitive sensor2With additional external in-/utputs (potentialfree, 100mA), 7 external digital inputs2- 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs3Vith additional digital outputs rothe main-axis - 2 direction signals + 1 zero position signal (potential-free) per axis3	Idle current co	nsumption									
Baud rate 125kBit/s to 1Mbit/s Output value 2550255 Wiring CAN (IN) cable 300mm with plug connector M12 (male) External in-/outputs cable 300mm output plug connector Determation of the plug connector M12 (female) External in-/outputs cable 300mm output plug connectors see page 129) CAN V24 F312 1 - 7 analog joystick axis - 15 digital joystick functions F312 1 - 7 analog joystick functions - With additional external in-/output scable by 7 pieces! - Input for capacitive sensor E312 1 With additional external in-/output (potentialfree, 100mA), 7 external digital inputs 2 16 external LED-outputs, 1 surtching output (potentialfree, 100mA), 7 external digital inputs 3 With additional digital outputs reture main-axis - 2 direction signal (potential-free) per axis 3											
Output value2550255WiringCAN (IN) cable 300mm with plug connector M12 (male) External in-/outputs cable 300mm long without plug connectorCAN (OUT) cable 300mm with plug connector M12 (female) External in-/outputs cable 300mm long without plug connectorCAN V24E312 1- 7 analog joystick axis - 15 digital joystick functionsE312 1*With the use of external inputs, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensorE312 1With additional external in-/outputs, the joystickfunctions reduce by 7 pieces! - 1 nput for capacitive sensor2With additional external in-/outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs216 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs3VWith additional digital outputs to the main-axis - 2 direction signals + 1 zer vestion signal (potential-free) per axis3			CANOpen CiA DS 301 or SAE J 1939								
Wiring CAN (IN) cable 300mm with plug connector M12 (female) CAN (OUT) cable 300mm with plug connector M12 (female) External in-/outputs cable 300mm long without plug connector S CAN V24 E312 1 - 7 analog joystick axis - 15 digital joystick functions *With the use of external inputs, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensor E312 1 Vith additional external inputs, the joystickfunctions reduce by 7 pieces! - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 2 With additional digital outputs - 16 external LED-outputs, 1 zro position signal (potential-free) per axis 3	Baud rate 125kBit/s to 1Mbit/s										
CAN (OUT) cable 300mm with plug connector M12 (female) External in-/outputs cable 300mm long without plug connector Optional with plug connector (standard plug connectors see page 129) CAN V24 - 7 analog joystick axis - 15 digital joystick functions *With the use of external inputs, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensor With additional external in-vutputs - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction signals + 1 zero subtro signal (potential-free) per axis - 2 direction subtro subtro subtro subtro	Output value		2550255								
External in-/outputs cable 300mm long without plug connector Deptonal with plug connector (standard plug connectors see page 129) S CAN V24 E312 1 - 7 analog joystick axis E312 1 - 15 digital joystick functions F *With the use of external inputs, the joystickfunctions reduce by 7 pieces! E - Input for capacitive sensor Vith additional external in-/outputs - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 2 - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 3 - 2 direction signals + 1 zero position signal (potential-free) per axis 3	Wiring		CAN (IN) cable 300mm with plug connector M12 (male)								
Optional with plug connector (standard plug connectors see page 129) S CAN V24 E312 1 - 7 analog joystick axis 15 digital joystick functions - 15 digital joystick functions *With the use of external inputs, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensor - With additional external in-/outputs 2 - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 2 - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 3 With additional digital outputs for the main-axis - - 2 direction signals + 1 zero position signal (potential-free) per axis 3			CAN (OUT) cable 300mm with plug connector M12 (female)								
CAN V24 E312 1 - 7 analog joystick axis - 15 digital joystick functions * With the use of external inputs, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensor With additional external in-/outputs 2 - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 2 - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 3 With additional digital outputs for the main-axis - 2 direction signals + 1 zero position signal (potential-free) per axis 3			External in-/outputs cable 300mm long without plug connector								
 7 analog joystick axis 15 digital joystick functions *With the use of external inputs, the joystickfunctions reduce by 7 pieces! Input for capacitive sensor With additional external in-/outputs 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs With additional digital outputs for the main-axis 2 direction signals + 1 zero position signal (potential-free) per axis 			Optional with pl	ug connector (st	andard plug con	nectors see page	129)			S	
 15 digital joystick functions *With the use of external inputs, the joystickfunctions reduce by 7 pieces! Input for capacitive sensor With additional external in-/outputs 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs With additional digital outputs for the main-axis 2 direction signals + 1 zero position signal (potential-free) per axis 	CAN V24								E312 1		
*With the use of external inputs, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensor With additional external in-/outputs - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs - 2 direction signals + 1 zero position signal (potential-free) per axis - 2 direction signals + 1 zero position signal (potential-free) per axis	- 7 analog joys	stick axis									
 Input for capacitive sensor With additional external in-/outputs 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs With additional digital outputs for the main-axis 2 direction signals + 1 zero position signal (potential-free) per axis 											
With additional external in-/outputs 2 - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 2 - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 3 With additional digital outputs for the main-axis 3 - 2 direction signals + 1 zero position signal (potential-free) per axis 3											
 - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs With additional digital outputs for the main-axis - 2 direction signals + 1 zero position signal (potential-free) per axis 	- Input for cap	acitive sensor									
 - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs With additional digital outputs for the main-axis - 2 direction signals + 1 zero position signal (potential-free) per axis 	With additional	l external in-/ou	tputs								
 - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs With additional digital outputs for the main-axis - 2 direction signals + 1 zero position signal (potential-free) per axis 3 								2			
With additional digital outputs for the main-axis - 2 direction signals + 1 zero position signal (potential-free) per axis 3											
- 2 direction signals + 1 zero position signal (potential-free) per axis 3											
	With additional	l digital outputs	for the main-axis	;							
Additional analog outputs on request!	- 2 direction signals + 1 zero position signal (potential-free) per axis								3		

B7 B8

B9

B6

Multi-axis controller V24

Z01 Mating connector (CAN) M12 (male insert) with 2m cable

Z02 Mating connector (CAN) M12 (female contact) with 2m cable



20201140

20202298

S

CANOpen safety Supply voltage 9-36V DC Idle current consumption 120mA Mounting depth A 60mm Protocol CANOpen safety CIA 304 Baud rate 125kBit/s to 1Mbit/s Output value 255...0...255 Wiring CAN (IN) cable 300mm with plug connector M12 (male) CAN (OUT) cable 300mm with plug connector M12 (female) External in-/outputs cable 300mm long without plug connector Optional with plug connector (standard plug connectors see page 129) CANopen Safety V24 E411 1 - 7 analog joystick axis - 15 digital joystick functions *With the use of external inputs, the joystickfunctions reduce by 7 pieces! - Input for capacitive sensor With additional external in-/outputs - 8 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 2 - 16 external LED-outputs, 1 switching output (potentialfree, 100mA), 7 external digital inputs 3 With additional digital outputs for the main-axis - 2 direction signals + 1 zero position signal (potential-free) per axis 3 Additional analog outputs on request! Attachments



