



CONNECTION	BIPOLAR		PERMISSIBLE RADIAL+AXIAL FORCE																																																		
SPECIFICATION																																																					
VOLTAGE (VDC)	12 TO 48		AXIAL-FORCE $F_a$ (N)	$F_a=15$																																																	
AMPS/PHASE(A)	4.2		DISTANCE $a$ (mm)	20																																																	
HOLDING TORQUE (Nm) [lb-in]	1.87 [16.55]		RADIAL-FORCE $F_r$ (N)	52																																																	
DETENT TORQUE (Nm) [lb-in]	0.068 [0.602]		SHAFT PLAY (mm)	AXIAL	RADIAL																																																
STEP ANGLE (°)±ACCURACY	1.8±5% TO MICROSTEP			AT LOAD MAX: (N)	0.2Max	0.02																																															
WEIGHT (Kg) [lb]	1.1[2.43]																																																				
OVERTEMPERATURE PROTECTION (ELECTRONICS): 75°C																																																					
AMBIENT TEMPERATURE -10°~ 50°C [14°F ~ 122°F] (HIGHER TEMPERATURE REDUCES DUTY CYCLE)																																																					
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)																																																					
INSULATION CLASS B 130° [266°F]																																																					
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)																																																					
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)																																																					
			<table border="1"> <thead> <tr> <th colspan="2">X1, Phoenix MCV-04</th> <th colspan="2">X2, Phoenix MCV-10</th> </tr> <tr> <th>PIN No.</th> <th>Function</th> <th>PIN No.</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GND</td> <td>1</td> <td>Input1 (+24V)</td> </tr> <tr> <td>2</td> <td>Analog Input(0-10V)</td> <td>2</td> <td>Input2 (+24V)</td> </tr> <tr> <td>3</td> <td>Output (open drain)</td> <td>3</td> <td>Input3 (+24V)</td> </tr> <tr> <td>4</td> <td>+12V (Voltage Output, max.100mA)</td> <td>4</td> <td>-Enable +5/+24V</td> </tr> <tr> <td></td> <td></td> <td>5</td> <td>Enable +5/+24V</td> </tr> <tr> <td></td> <td></td> <td>6</td> <td>-Direction +5/+24V</td> </tr> <tr> <td></td> <td></td> <td>7</td> <td>Direction +5/+24V</td> </tr> <tr> <td></td> <td></td> <td>8</td> <td>-Clock +5/+24V</td> </tr> <tr> <td></td> <td></td> <td>9</td> <td>Clock +5/+24V</td> </tr> <tr> <td></td> <td></td> <td>10</td> <td>GND</td> </tr> </tbody> </table>			X1, Phoenix MCV-04		X2, Phoenix MCV-10		PIN No.	Function	PIN No.	Function	1	GND	1	Input1 (+24V)	2	Analog Input(0-10V)	2	Input2 (+24V)	3	Output (open drain)	3	Input3 (+24V)	4	+12V (Voltage Output, max.100mA)	4	-Enable +5/+24V			5	Enable +5/+24V			6	-Direction +5/+24V			7	Direction +5/+24V			8	-Clock +5/+24V			9	Clock +5/+24V			10	GND
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3	HOLE $\phi 5$ ADD TOLERANCE $+0.5_0$	11.07.22	YBY	 <b>Nanotec</b> <sup>®</sup> PLUG & DRIVE	APVD	G.M.	16.05.14	<b>PLUG&amp;DRIVE MOTOR</b> DWG.NO PD4-C5918L4204-E-01			
2	NEW HOLDING TORQUE	11.10.16	GYQ		CHKD						
REV	DESCRIPTION	DATE	DRN	Surface specification DIN ISO 1302	General tolerances DIN ISO 2768-cH	Work piece edge DIN ISO 13715	DRN	GYQ	16.05.14	SIGNATURE	DATE