HYBRID STEPPING MOTOR

Wiring Diagram:

RED A
YEL $\overline{A}$
BLU $\overline{C}$
BLK C

ARC CODE:160-010-00430

B $\overline{B}$ $\overline{D}$ D
WHT PUR BRN GRN

Dimensions:
(unit=mm)

30±1   87Max   30±1

Ø8 0 −0.013

Ø8 0 −0.013

Ø38±0.025

1.7

7

300Min.
UL1007 AWG22#

60

47.14±0.15

47.14±0.15   60

4−Ø4.5

300Min.
UL1007 AWG22#
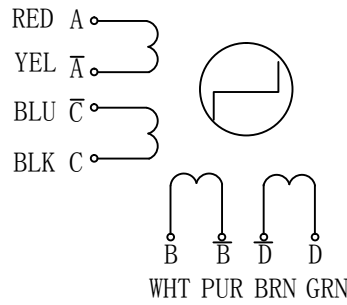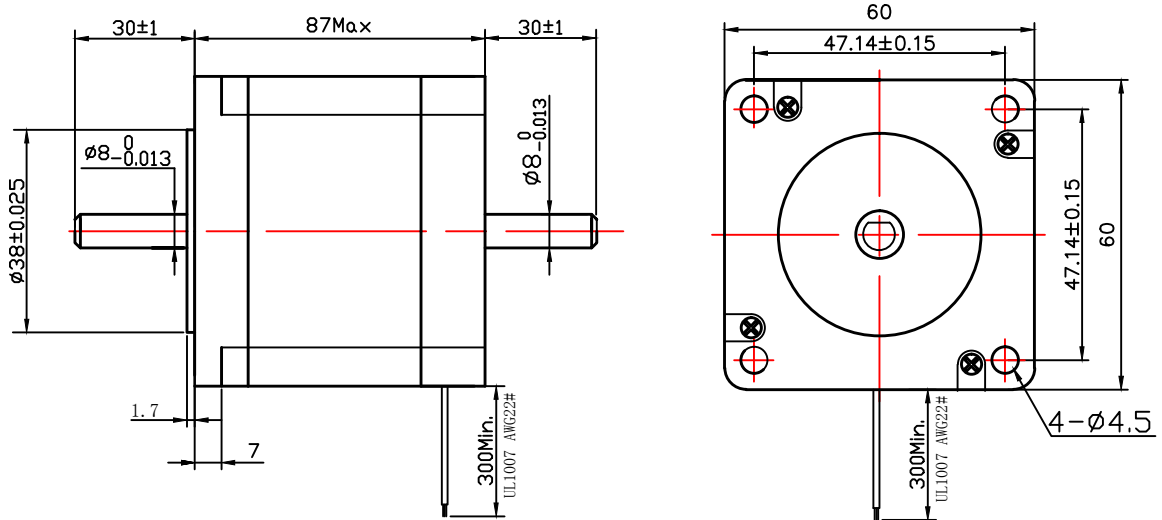
Electrical Specifications:

STEP ANGLE	1.8 ° /STEP	COMMENT
RATED VOLTAGE	3.9(UNI.) V	BI-POLAR(S): 2.1A, 3Nm
CURRENT	3.0(UNI.) A/PHASE	
RESISTANCE	1.3(UNI.) Ω /PHASE	
INDUCTANCE	3.2(UNI.) mH/PHASE	BI-POLAR(P): 4.2A, 3Nm
HOLDING TORQUE	2(UNI.) Nm	
INSULATION CLASS	B	

Arc Euro Trade

Motor connections for Arc Euro Trade Stepper Motors

160-010-00100:   36Ncm, 1A/Phase, 6mm Shaft
160-010-00200:   180Ncm, 2.5A/Phase, 6mm Shaft
160-010-00300:   180Ncm, 2.5A/Phase, ¼" Shaft
160-010-00400:   220Ncm, 2.5A/Phase, 10mm Shaft
160-010-00430:   300Ncm, 4.2A/Phase, 8mm Shaft

For BIPOLAR SERIES:

Join YELLOW A to BLUE C and insulate connection
Join PURPLE B to BROWN D and insulate connection
Winding One then equals RED and BLACK
Winding Two then equals WHITE and GREEN

For BIPOLAR PARALLEL:

Join RED to BLUE
Join YELLOW to BLACK. This is then Winding One.
Join WHITE to BROWN
Join PURPLE to GREEN. This is then Winding Two.

For UNIPOLAR FOUR PHASE:

Use RED, BLACK, WHITE and GREEN as the PHASE wires.
Join YELLOW to BLUE, and PURPLE to BROWN; these then
become the POWER connections.
The phase sequence is RED, GREEN, BLACK WHITE (or WHITE,
BLACK, GREEN, RED for reverse).

The Arc Euro Trade **160-020-00101 4.2A** controller will drive our **160-010-00100, 160-010-00200, 160-010-00300, 160-010-00400 and 160-010-00430** motors at their rated power if set up correctly and connected to a **smoothed DC power supply rated at 2x the current setting used on the controller.**

We regret we are unable to advise you on the suitability of these motors for any application.

Additional information for the Arc Euro Trade 4" and 6" Rotary Tables fitted with our 160-010-00300 Stepper Motor

The motor is wired in Bi-Polar Parallel mode to a 4 pin XLR plug

Pin 1: Red and Blue
Pin 2: Yellow and Black
Pin 3: Purple and Green
Pin 4: White and Brown

We also supply a suitable XLR chassis socket, Code 160-030-00225