

## PBL4850E Programmable Drive

The PBL4850E IDEA™ Drive brushless motor controller is a servo drive and fully programmable control unit which will simplify your machine building experience. An intuitive patent-pending Graphic User Interface (GUI) removes the complexity of programming while support tools simplify its quick integration.

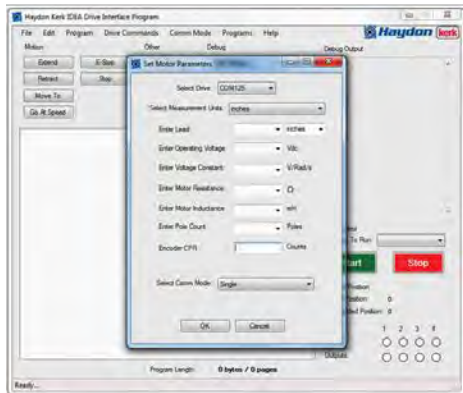


### ■ Benefits

- RoHS Compliant
- Stand-alone drive unit
- Programming done through Graphic User Interface (GUI)
- Automatic population of motor and drive parameters
- Programmable Speed / Current / Accel-Decel / Current Boost / Interrupts / I/O
- Sinusoidal commutation
- USB Communication protocol
- Movement profile plotter
- Interactive program debug feature
- Optional motor cables

### ■ Characteristics

Data	Part No.
	PBL4850E
Drive Input Voltage Range	12 to 48 V DC
Maximum Drive Current/Phase	4.0 A rms / 6.5Apeak
Current Boost Capability	Optional 30% current boost capability during ramping (6.5 Apeak max)
Communications	USB (mini B)
Commutation	Sinusoidal (Halls and encoder required)
Motor	3 Phase Brushless
Hall Cell Spacing	60° / 120°
Encoder (min. requirement)	5V, Incremental encoder with 128 CPR min.
Digital I/O Voltage Range	5 to 24 V DC
Digital Inputs	4
Digital Input Max Current	8 mA (each)
Digital Outputs (Sinking)	4
Digital Output Max Current (Sinking)	200 mA
Maximum Temperature	70° measured at heat sink
Program Storage Size	85 Kbytes
Program Storage Memory Type	Flash
Maximum Number Stored Programs	85 - referenced by 10 character program names
Position Counter Range	64 bit
Ramping	Trapezoidal or S-Curve
Interrupt Sources	4 Inputs (rising, falling or both edges) Internal Position Counter (when reaching a programmed position)



Simple to use drive software with on-screen buttons and easy to understand programming guides.

■ I/O Connector TABLE "A"

PIN	Description	Note
1	GROUND I/O SUPPLY	5 - 24 VDC
2	+ I/O SUPPLY	5 - 24 VDC
3	INPUT 1	
4	INPUT 2	
5	INPUT 3	
6	INPUT 4	
7	OUTPUT 1	
8	OUTPUT 2	
9	OUTPUT 3	
10	OUTPUT 4	

■ I/O Connector TABLE "B"

PIN	Description	Note
1	"A" CHANNEL	
2	HALL CELL A	
3	"B" CHANNEL	
4	HALL CELL B	
5	INDEX / ENCODER	
6	HALL CELL C	
7	+5 V DC	
8	+5 V DC	
9	GROUND	
10	GROUND	

■ Optional Accessories

Description	Part No.
USB Cable (A to Mini B), 2 meters	56-1346
Power Cable, 1 meter	56-1348
I/O Cable, 1 meter	56-1352
Motor Connector Screw Terminal	56-1570
Hall Cell & Encoder Cable	56-1856

Dimensional Drawing: PBL4850E

