

Digital Speed Potentiometer with Display



Baldor's microprocessor-based digital speed potentiometer with LED display of set speed may be used to replace the conventional 3-wire analog speed pot for most AC and DC drives. Desired set speed may be entered into the large 1/2" LED display by pressing the "up" and "down" pushbuttons: one digit at a time or in a fast sweep. Display shows 0.1% increments of full motor speed (0-100%).

Specifications

Temperature	-10°C to +45°C
AC input voltage	85-264 VAC
Input frequency	50/60 Hz
Supply voltage applied across output	5 VDC to 15 VDC
Speed regulation	Same as driven unit
Input impedance to DSP4 will drive	500 ohm to 100 K ohm
Output	Isolated 3-wire pseudo-pot (normal or inverted output)
Display settings	0-100% of set speed range in 0.1% increments (resolution of 1000)
Non-volatile memory	Retains last set point upon loss of AC power (user selectable via dip switch settings)

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Input Voltage
DSP4-6	Digital Speed Potentiometer with Display	503	E9	2	120/240 VAC 50/60 hz

Field Programmable Digital Tachometer for Rate and Time with Display



Baldor offers an economical micro-processor-based digital tachometer capable of measuring motor speeds as low as 1 rpm that is field programmable for desired user specified units: RPM, FPM and GPM. Process time or other engineering units requires an input signal unit with 1 to 30,000 PPR such as the HPU and RK60 devices. For use with digital tachometers.

Specifications

Temperature	-10°C to +45°C
AC input voltage	85-264 VAC
Input frequency	50/60 Hz
Input pulse rate	1 to 30,000 input pulses per minute
Resolution	from 0.01 RPM
Accuracy	±0.04% display update every pulse or 0.5 seconds, whichever is longer
Isolated high/low alarm output	5 amp 240 VAC max.
Transducer signal input	0-5 to 0-24 VDC square wave (hall-effect, photoelectric, magnetic or any TTL NPN open collector device.)

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Input Voltage
DTM8000-6	Digital Tachometer for Rate & Time with Display	550	E9	1	120/240 VAC 50/60 hz

HVAC Motors

Farm Duty Motors

Definite Purpose Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Start & Dynamic Brakes

Hall Effect Pickup HPU10



Provides square wave pulse feedback. HPU mounts to a stub shaft opposite the pulley end of the motor and provides 10 pulses per revolution. May be installed through Baldor's Mod-Express

Features: HPU10 Series pick-up mounts directly on shaft being monitored using a single 10-32 screw (motor shaft requires modification and/or an adapter). Use with BC450/BC440 DC controls and DTM8000 digital tachometer.

Specifications

Temperature	-10°C to +45°C
Supply Voltage	+4.5 to +24 VDC
Maximum Speed	5000 RPM
Output Cable	6 foot rubber-jacketed, 3 wire 18 AWG conductors Red Wire: +VDC supply input Black Wire: Common White Wire: Signal
Output Signal	10 pulses per revolution NPN output signal with built-in pull-up resistor. Square wave output, signal voltage equals supply voltage. +5 VDC to +24 VDC supply voltage. Current sink: 5 mA maximum
Bearings	Stainless steel ball bearing
Enclosure	Compact housing molded of "Santoprene" plastic rubber

Hall Effect Pickup RK60



Provides square wave pulse feedback. The RK models are ring kits that mount to the 56C and 145TC face of the motor. May be installed through Baldor's Mod-Express

Features: RK60 Series hall effect pick-up consists of a motor mounted C-face ring, sensor, mounting bolts, and magnet disc. Use with BC450/BC440 DC controls and DTM8000 digital tachometer.

Specifications

Temperature	-40°C to +125°C
Supply Voltage	+4.5 to +24 VDC
Output Connection	3 wires Red Wire: +VDC supply input Black Wire: Common Blue Wire: Signal
Output Signal	60 pulses per revolution NPN output signal (may require external pull-up resistor). Square wave output, signal voltage equals supply voltage. +5 VDC to +24 VDC supply voltage. Current sink: 20 mA
Sensing Disk	Molded magnet sensing disc, impervious to dust, dirt, and oil
Mounting	C-face mounting ring has double C-face and is 0.750" thick. (Please note that usable shaft length will be reduced by 0.750". Check application for suitability).



**TK3300-HPU
Mounting Kit
for TENV/33P
DC Motors**



**TK3400-HPU
Mounting Kit
for TEFC/34P
DC Motors**

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
HPU10	10 PPR Hall-Effect Pickup	182	E9	2
RK60-56	60 PPR Hall-Effect Pickup with 56C Ring Kit	601	E9	2
RK60-145	60 PPR Hall-Effect Pickup with 143-145TC Ring Kit	601	E9	2
TK3300-HPU	HPU10 Mounting Kit for TENV/33P DC Motors (does not include pickup)	79	A8	1
TK3400-HPU	HPU10 Mounting Kit for TEFC/34P DC Motors (does not include pickup)	92	A8	1

HVAC Motors

Farm Duty Motors

Definite Purpose Motors

Brake Motors

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IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Start & Dynamic Brakes

Digital DC Controls

1/20 thru 1 Hp
1/8 thru 2 Hp

115 VAC Single Phase 50/60 Hz
230 VAC Single Phase 50/60 Hz



Applications: General purpose industrial use with permanent magnet motors.

Features: Compact programmable DC speed control with digital closed loop feedback and LED display. Front-panel programming allows customizing the control function and can display the set speed in RPM, FPM, GPM, process time or any other engineering units. Programmable parameters include minimum and maximum speed, decimal points, operating mode (leader or follower), and Run/Jog functions. Industry standard cutout dimensions of 1/8 DIN and 1/4 DIN provide easy panel installation and NEMA 4X faceplate with supplied gasket. Use with hall effect pickup shown on page 341.

Specifications

Temperature	-10 Deg C to +45 Deg C
AC input voltage	Universal power supply rated at 85 to 265 VAC
Input frequency	50/60 Hz
Overload capacity	200% for 1 minute
Motor Feedback Input	0-24 Volt Square Wave Digital Tachometer
On-board power supply	5 VDC, 50mA (for external feedback sensor)
Pulse input capacity	50,000 PPM (500,000 with divider function on)

Hp Range	Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Input Voltage
1/20-1/2	BC440-6	Digital Closed Loop DC Speed Control,	777	E9	2	115 VAC 50/60 Hz
1/8-1		1/8 DIN Panel Mount				230 VAC 50/60 Hz
1/8-1	BC450-6	Digital Closed Loop DC Speed Control,	1058	E9	2	115 VAC 50/60 Hz
1/4-2		1/4 DIN Panel Mount				230 VAC 50/60 Hz

HVAC Motors

Farm Duty Motors

Definite Purpose Motors

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