

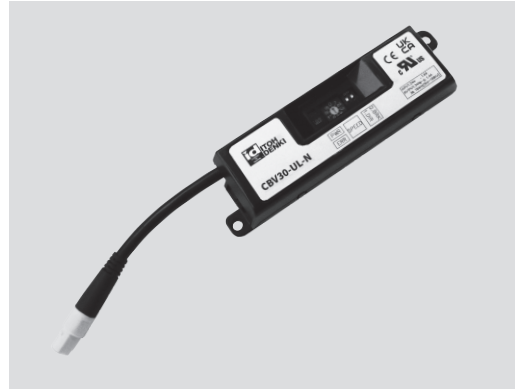
Driver card for PM380/427VS



# CBV30

**[Applicable MDR models]**  
PM380VS·PM427VS

**[Driver card model]**  
CBV30-UL-N  
N : NPN signal input and output  
P : PNP signal input and output



**Standard Accessories**

- Power connector(CN 1) ————— 1pce
- Control connector(CN 2) ————— 1pce
- Mounting screws and nuts Screw M4×15 — 2pcs
- Nut M4 ————— 2pcs

■ **Stable speed function**

Transfer speed is kept stable regardless of the load variation.  
It helps improve transfer accuracy.

■ **Adopts 6pin D-shaped connector**

Prevent mis-wiring and easy maintenance.

■ **Smallest driver card fit in 60mm frame height**

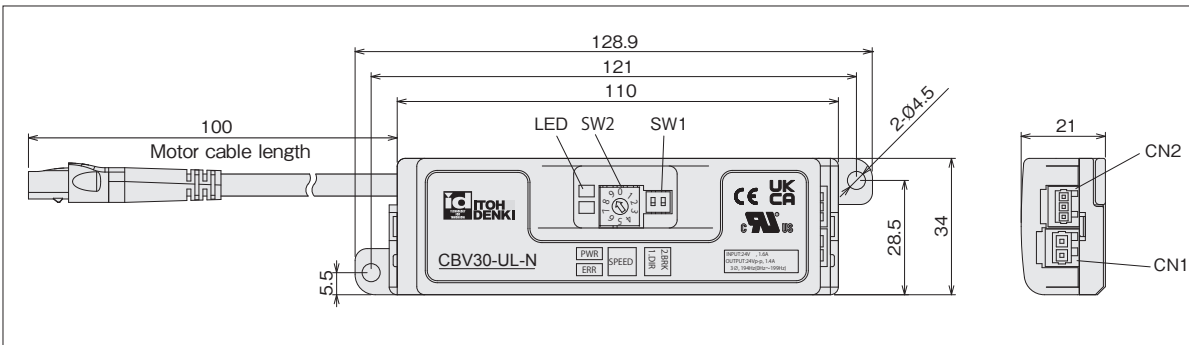
Realize a thin conveyor by smallest driver card.

■ **Speed can be set in 10 steps**

Speed variation for each driver card is adjustable with rotary switch.

■ **Error types are identified**

LED indication identifies the type of error; thermal, motor lock, low voltage, back EMF, blown fuse and motor disconnected.



● **SW1 (DIP switch)**

ON ON		Number	Description	ON	OFF	Factory setting
OFF OFF	1					
OFF OFF		1	Rotating direction	Refer to next page		OFF
OFF OFF		2	Switching brake type	Servo brake	Short circuit brake	OFF

● **CN(connector)**

CN 1 (Power supply)	#2	0V	
	#1	24V DC	
CN 2 (Control)	No.	Function	Application
	#3	STTS	STATUS (Signal output)
	#2	DIR	Switching of the direction of rotation
#1	RUN	Start/Stop (RUN/STOP)	

● **SW2(Rotary switch)**

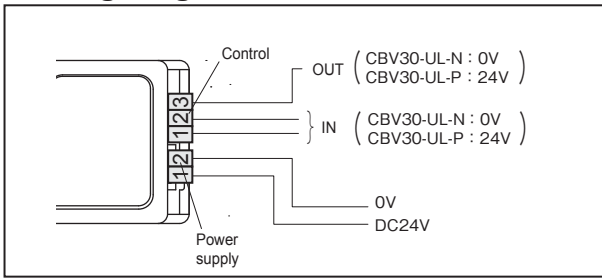
		Internal speed setting										
		SW2										
Specified speed	PM380VS	Nominal speed 17	17.4	14.5	11.6	8.7	7.2	5.8	4.3	2.9	2.3	1.5
		Nominal speed 60	60.0	50.0	40.0	30.0	25.0	20.0	15.0	10.0	8.0	5.0
	PM427VS	Nominal speed 17	19.5	16.3	13.0	9.8	8.1	6.5	4.9	3.3	2.6	1.6
		Nominal speed 60	67.4	56.2	45.0	33.7	28.1	22.5	16.9	11.2	9.0	5.6

■ :Factory setting

● **LED**

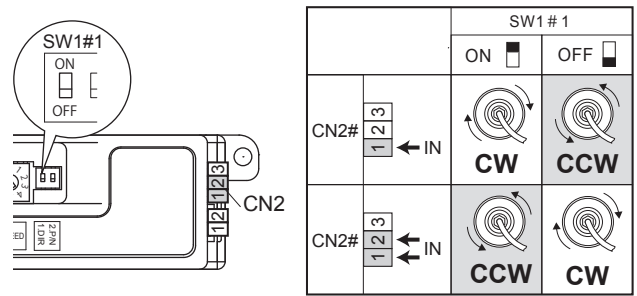
■	PWR (Green)	Power status and error types are indicated.
■	ERR (Red)	

**[Wiring diagram]**



- \*Wiring should be made while the product is not powered.
- \*Switch for Run/stop or CW/CCW is an option and is not supplied.
- \*Relay contact or PLC output can be used instead of the above switch.

**[Direction setting]**

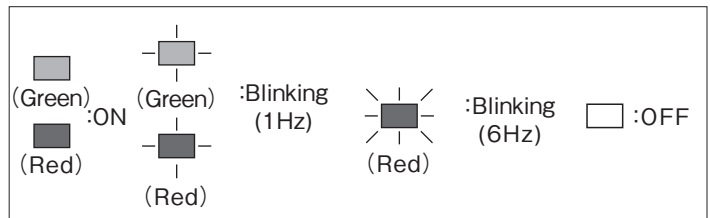


■ Direction setting by SW1#1 is not available during transferring (MDR running).

**[Specifications]**

Model	CBV30	
Power supply voltage	24V DC±10%	
Rated voltage	24V DC	
Static current	0.05A	
Starting current	2.6A±0.2A	
Peak current	20A (1msec)	
Wire diameter	Power connector (CN1)	WAG0734-102 Wire diameter : 0.5 to 1.5mm <sup>2</sup>
	Control connector (CN2)	WAG0733-103 Wire diameter : 0.08 to 0.5mm <sup>2</sup>
Time from RUN signal input to motor starting	20msec or less	
Thermal protection	Driver card unit:95°C Motor:110°C	
Operating environment	Ambient temperature	0 to 40°C (no freezing)
	Ambient humidity	90%RH or less (no condensation)
	Atmosphere	No corrosive gas
	Vibration	1.0G or less
Installation location	Indoor	

**[Error details]**



PWR (Green) ERR (Red)	CN2#3 STTS signal	Type of error
■ □	Output	Normal operation
■ ■	Open	Fuse blown
■ ■	Open	Low voltage
■ ⇕ ■	Open	Motor connector unconnected Motor cable disconnected
■ ■	Open	Motor lock
■ or ■	Open	Driver card/MDR thermal error
■ ■	Open	Back EMF error

Error can be checked by PWR (Green), ERR (Red) and a signal from CN2#3.