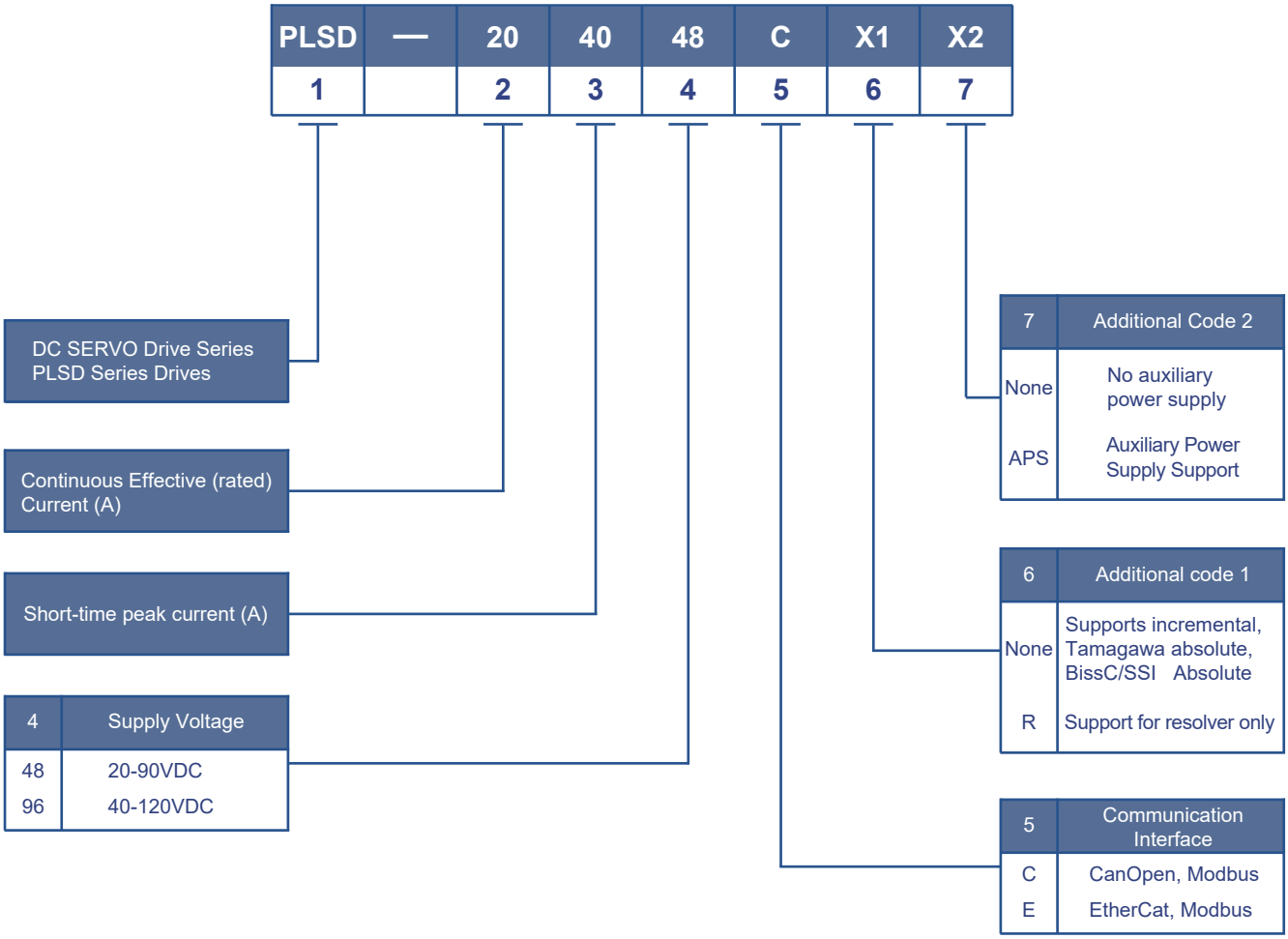
PLSD Series DC Servo Drives

- **Can be used to drive low-voltage permanent magnet synchronous motors, DC brushless motors, DC brushed motors**
- **Support Modbus/CanOpen/EtherCat**
- **Supports incremental encoders, SSI/BISSB/BISSC absolute encoding NRZ Tamagawa Absolute Encoder, Hall Signal Position, Rotary Transformer**
- **Peak current 500A**

PLSD Series DC Servo Drives Model Definition



Electrical Characteristics of PLSD Series Low Voltage Servo Drives

Model Number		PLSD-2040	PLSD-2550	PLSD-3060	PLSD-3570	PLSD-4080
Input Voltage Range		20-110VDC	40-120VDC	20-90VDC	40-120VDC	20-90VDC
Maximum continuous output current (A)		20	25	30	35	40
Maximum output current (A)		40	50	60	70	80
PWM Frequency		10KHz				
Supported Motors		Permanent Magnet Synchronous Motor (PMSM), Brushless DC Motor (BLDC), Brushed DC Motor				
Input and output	Analog Input	2 analog inputs, -10V-+10V				
	Digital Input	8 digital inputs, 12-30VDC				
	Digital Output	4 digital outputs, open collector outputs				
Bus Function	Modbus	RS485 interface, standard Modbus protocol				
	CanOpen	Standard CanOpen protocol, CiA301/402				
	EtherCAT	Standard CoE protocol				
Encoder Interface		Incremental Encoders, SSI/BISSB/BISSC Absolute Encoders, NRZ,Tamagawa Absolute Encoders,Hall signal position feedback, resolver				
Control Characteristics	Control Method	Speed control (PV), torque control (PT), position control (PP), IP, CSP, CSV, CST				
	SBC&STO	Not have				
Matrix	Location	Indoors, out of direct sunlight, free of dust, corrosive gases, flammable gases, oil mist, water vapor, etc.				
	Ambient Temperature	-20°C to 50°C, derated for 40°C above				
	Altitude	The altitude of the place of use is less than 1000m, and above 1000m, it is used at a reduced level.				
	Humidity Level	Below 95% RH, no water condensation				
	Vibratory	Less than 0.5G (4.9m/s2), less than 10Hz				
	Storage Temperature	-40℃-70℃				
	Cooling method	Natural cooling				
Weight (kg)		0.6	0.7	0.7	0.8	0.8

Electrical Characteristics of PLSD Series Low Voltage Servo Drives

Model Number		PLSD-80100	PLSD-70140	PLSD-80160	PLSD-95200	PLSD-100200
Input Voltage Range		20-90VDC	40-120VDC	20-90VDC	20-90VDC	20-90VDC
Maximum continuous output current (A)		80	70	80	95	100
Maximum output current (A)		160	140	160	200	200
PWM Frequency		10KHz				
Supported Motors		Permanent Magnet Synchronous Motor (PMSM), Brushless DC Motor (BLDC), Brushed DC Motor				
Input and output	Analog Input	2 analog inputs, -10V-+10V				
	Digital Input	8 digital inputs, 12-30VDC				
	Digital Output	4 digital outputs, open collector outputs				
Bus Function	Modbus	RS485 interface, standard Modbus protocol				
	CanOpen	Standard CanOpen protocol, CiA301/402				
	EtherCAT	Standard CoE protocol				
Encoder Interface		Incremental Encoders, SSI/BISSB/BISSC Absolute Encoders, NRZ Tamagawa Absolute Encoders, Hall signal position feedback, resolver				
Control Characteristics	Control Method	Speed control (PV), torque control (PT), position control (PP), IP, CSP, CSV, CST				
	SBC&STO	Not have				
Matrix	Location	Indoors, out of direct sunlight, free of dust, corrosive gases, flammable gases, oil mist, water vapor, etc.				
	Ambient Temperature	-20°C to 50°C, derated for 40°C above				
	Altitude	The altitude of the place of use is less than 1000m, and above 1000m, it is used at a reduced level.				
	Humidity Level	Below 95% RH, no water condensation				
	Vibratory	Less than 0.5G (4.9m/s2), less than 10Hz				
	Storage Temperature	-40℃-70℃				
	Cooling method	Natural cooling				
Weight (kg)		1.85	2	2.7	2	2

Electrical Characteristics of PLSD Series Low Voltage Servo Drives

Model Number		PLSD-150300	PLSD-250500
Input Voltage Range		20-120VDC	20-120VDC
Maximum continuous output current (A)		150	250
Maximum output current (A)		300	500
PWM Frequency		10KHz	
Supported Motors		Permanent Magnet Synchronous Motor (PMSM), Brushless DC Motor (BLDC), Brushed DC Motor	
Input and output	Analog Input	2 analog inputs, -10V-+10V	
	Digital Input	8 digital inputs, 12-30VDC	
	Digital Output	4 digital outputs, open collector outputs	
Bus Function	Modbus	RS485 interface, standard Modbus protocol	
	CanOpen	Standard CanOpen protocol, CiA301/402	
	EtherCAT	Standard CoE protocol	
Encoder Interface		Incremental Encoders, SSI/BISSB/BISSC Absolute Encoders, NRZ Tamagawa Absolute Encoders, Hall signal position feedback, resolver	
Control Characteristics	Control Method	Speed control (PV), torque control (PT), position control (PP), IP, CSP, CSV, CST	
	SBC&STO	Not have	
Matrix	Location	Indoors, out of direct sunlight, free of dust, corrosive gases, flammable gases, oil mist, water vapor, etc.	
	Ambient Temperature	-20°C to 50°C, derated for 40°C above	
	Altitude	The altitude of the place of use is less than 1000m, and above 1000m, it is used at a reduced level.	
	Humidity Level	Below 95% RH, no water condensation	
	Vibratory	Less than 0.5G (4.9m/s2), less than 10Hz	
	Storage Temperature	-40℃-70℃	
	Cooling method	Natural cooling	
Weight (kg)		2.7	4.5

PLSD Series Low Voltage Servo Drives Selection List (CANOpen)

Drive Ordering Number	Input Voltage	Rated Current (A)	Peak Current (A)	Encoder Support	Control Method	Safety Function (SBC&STO)	Operating Temperature
PLSD-204048-C	20-90VDC	20	40		Analog Pulse Modbus CanOpen		
PLSD-204096-C	40-120VDC						
PLSD-255096-C	40-120VDC	25	50				
PLSD-306048-C	20-90VDC	30	60				
PLSD-357096-C	40-120VDC	35	70				
PLSD-408048-C	20-90VDC	40	80				
PLSD-5010048-C	20-90VDC	50	100	Incremental encoders, Hall signals			
PLSD-7014096-C	40-120VDC	70	140	SSI/SSB/BISSC protocol absolute value		Not have	-40°-50°
PLSD-8016048-C	20-90VDC	80	160	NRZ Tamagawa Protocol Absolute			
PLSD-9520048-C	20-90VDC	95	200				
PLSD-10020048-C	20-90VDC	100	200				
PLSD-15030048-C	20-90VDC	150	300				
PLSD-15030096-C	40-120VDC						
PLSD-25050048-C	20-90VDC	250	500				
PLSD-25050096-C	40-120VDC						

PLSD Series Low Voltage Servo Drives Selection Table (EtherCat)

Drive Ordering Number	Input Voltage	Rated Current (A)	Peak Current (A)	Encoder Support	Control Method	Safety Function (SBC&STO)	Operating Temperature
PLSD-204048-E	20-90VDC	20	40		Analog Pulse Modbus CanOpen		
PLSD-204096-E	40-120VDC						
PLSD-255096-E	40-120VDC	25	50				
PLSD-306048-E	20-90VDC	30	60				
PLSD-357096-E	40-120VDC	35	70				
PLSD-408048-E	20-90VDC	40	80				
PLSD-5010048-E	20-90VDC	50	100	Incremental encoders, Hall signals			
PLSD-7014096-E	40-120VDC	70	140	SSI/SSB/BISSC protocol absolute value		Not have	-40°-50°
PLSD-8016048-E	20-90VDC	80	160	NRZ Tamagawa Protocol Absolute			
PLSD-9520048-E	20-90VDC	95	200				
PLSD-10020048-E	20-90VDC	100	200				
PLSD-15030048-E	20-90VDC	150	300				
PLSD-15030096-E	40-120VDC						
PLSD-25050048-E	20-90VDC	250	500				
PLSD-25050096-E	40-120VDC						

PLSD Series Low Voltage Servo Drives Selection Table (CANOpen & Rotation)

Drive Ordering Number	Input Voltage	Rated Current (A)	Peak Current (A)	Encoder Support	Control Method	Safety Function (SBC&STO)	Operating Temperature
PLSD-204048-CR	20-90VDC	20	40		Analog Pulse Modbus CanOpen		
PLSD-204096-CR	40-120VDC						
PLSD-255096-CR	40-120VDC	25	50				
PLSD-306048-CR	20-90VDC	30	60				
PLSD-357096-CR	40-120VDC	35	70				
PLSD-408048-CR	20-90VDC	40	80				
PLSD-5010048-CR	20-90VDC	50	100				
PLSD-7014096-CR	40-120VDC	70	140	Rotary Transformer		Not have	-40°-50°
PLSD-8016048-CR	20-90VDC	80	160				
PLSD-9520048-CR	20-90VDC	95	200				
PLSD-10020048-CR	20-90VDC	100	200				
PLSD-15030048-CR	20-90VDC	150	300				
PLSD-15030096-CR	40-120VDC						
PLSD-25050048-CR	20-90VDC	250	500				
PLSD-25050096-CR	40-120VDC						

PLSD Series Low Voltage Servo Drives Selection Table (EtherCat & Rotation)

Drive Ordering Number	Input Voltage	Rated Current (A)	Peak Current (A)	Encoder Support	Control Method	Safety Function (SBC&STO)	Operating Temperature
PLSD-204048-ER	20-90VDC	20	40		Analog Pulse Modbus CanOpen		
PLSD-204096-ER	40-120VDC						
PLSD-255096-ER	40-120VDC	25	50				
PLSD-306048-ER	20-90VDC	30	60				
PLSD-357096-ER	40-120VDC	35	70				
PLSD-408048-ER	20-90VDC	40	80				
PLSD-5010048-ER	20-90VDC	50	100				
PLSD-7014096-ER	40-120VDC	70	140	Rotary Transformer		Not have	-40°-50°
PLSD-8016048-ER	20-90VDC	80	160				
PLSD-9520048-ER	20-90VDC	95	200				
PLSD-10020048-ER	20-90VDC	100	200				
PLSD-15030048-ER	20-90VDC	150	300				
PLSD-15030096-ER	40-120VDC						
PLSD-25050048-ER	20-90VDC	250	500				
PLSD-25050096-ER	40-120VDC						