

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

SANYO DENKI

Sanyo Denki PY2A030A2 Servo Amplifier

Sanyo Denki PY2A030A2 PY2 AC Servo Amplifier The Sanyo Denki PY2A030A2 is a PY2-series SanMotion AC servo amplifier, 30 A class, for motors to about 1 kW. PY2A030A2 is a parameter-set model (motor, sensor, and interface specified in parameters). Main circuit is 3-phase or single-phase 200 to 230 VAC +10/-15 percent, 50/60 Hz. Control is IGBT PWM sine-wave, with velocity, torque, or position via parameters. Built-in dynamic brake; regenerative circuit built in, resistor optional. Forced-air cooling on 30 A types. Mass 2.0 kg. The Sanyo Denki PY2A030A2 is a PY2-series SanMotion AC servo amplifier, 30 A class, for motors to about 1 kW. PY2A030A2 is a parameter-set model (motor, sensor, and interface specified in parameters). Main circuit is 3-phase or single-phase 200 to 230 VAC +10/-15 percent, 50/60 Hz. Control is IGBT PWM sine-wave, with velocity, torque, or position via parameters. Built-in dynamic brake; regenerative circuit built in, resistor optional. Forced-air cooling on 30 A types. Mass 2.0 kg. AC servo axes to 1 kW; P50/P60/P30 Super BL motors per combination table; compact replacement of PY/PZ/PE amplifiers (about 65 percent smaller volume than PY at this rating).



MODEL

**Sanyo Denki
PY2A030A2**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

PY2A030A2

LISTING

<https://aumictechlabs.com/products/py2a030a2-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Sanyo Denki PY2A030A2 is a three-phase AC servo amplifier engineered for precise motion control across industrial automation, robotics, and motion systems requiring coordinated motor

drive. Operating from 200–230 VAC, 50/60 Hz input, this amplifier delivers 30A output current and supports servo motors in the 300W to 1000W range. It executes position, speed, and torque control modes with dynamic switching during operation, backed by auto-tuning functionality to streamline commissioning.

Technical Specifications

Input: 200–230 VAC, 3-phase, 50/60 Hz
Output current: 30A
Output frequency: 8 kHz
Motor capacity: 300W to 1000W (configuration dependent)
Control modes: Position, speed, torque (switchable during operation)
Encoder support: Incremental (INC-E) and absolute (ABS-E) encoders
Dynamic brake: Integrated
Regenerative resistor: Built-in (configuration dependent)
Operating temperature: Less than 55°C ambient
Storage temperature: –20°C to +65°C
Cooling: Convection
Installation: Vertical mounting recommended

Key Features

Auto-tuning capability reduces setup time and optimizes motor response
Dual-encoder compatibility eliminates wiring constraints between encoder types
Status indication via 7-segment display, Charge LED, and Power LED
RDY (Ready) status output for system integration
Dust and oil-free environment required for reliable operation

Typical Applications

Industrial automation systems, robotic positioning, CNC control, and multi-axis motion platforms requiring coordinated servo drive with field-switching control modes.

Compatibility & Integration

Motor selection must be verified against the Sanyo Denki compatibility matrix; ensure pairing with approved SanMotion servo motors. Remote operator command input and software-based control both supported. End users are responsible for final CE conformity validation on their integrated systems.

Features & description

From manufacturer datasheet

Features

- PY2A030 30 A, ~1 kW class; A2 parameter-configurable
- 200-230 VAC 3-phase or single-phase main; 200-230 VAC control
- IGBT PWM sine drive; velocity/torque/position
- Velocity range 1:5000; 400 Hz bandwidth JL=JM
- Dynamic brake built-in; external regen resistor (50 ohm class)
- Forced-air cooling; CHARGE lamp discharge wait ~5 min without external regen

PY2A030A2 Characteristics / Specifications

PARAMETER	VALUE
Frequency Characteristics	400 Hz (JL = JM)
Dynamic Brake	built-in
Regenerative	circuit built-in; resistor optional (not built-in on PY2A030)
Regen Resistance Table	50 ohm for PY2A030 / PY2E030
Monitor Reference Regen	5 W or 10 W per Func2 bit 4
Velocity Monitor	0.5 V +/-20 percent at 1000 min-1
Current Monitor	0.5 V +/-20 percent at 100 percent
Command Voltage	+/-2.0 VDC at 1000 min-1 (max +/-10 V)
Inrush Main Circuit	40 A (0-P) within 600 ms after power on (with *1 note)
Cooling	forced air (30 A and 50 A)
Volume Versus PY	about 65 percent smaller (PY2A030 to 1 kW)
LED Display	internal status and alarms
Protection	overcurrent, overload, overheat, overspeed, sensor, open-phase, regen, CPU, and related faults
Example Motor	P30B06040D 1.0 kW class combination
Interface Letters Family	S speed, T torque, P position, X/Y/U switch types
Output Voltage Listing	0 to 365 V (distributor)
Output Current Listing	5.2 A (distributor)
PWM Listing	20.8 kHz (distributor) Notes Specs from Sanyo Denki PY2 servo amplifier instruction manual Table 9-1 and PY2A030A2 listings. Distributor 0-365 V / 5.2 A / 20.8 kHz should be confirmed on the nameplate versus the manual combination table. Confirm motor/encoder parameters after replacing A2 units.

Technical Specifications

PARAMETER	VALUE
Model	PY2A030A2
Manufacturer	Sanyo Denki
Instrument Type	AC Servo Amplifier
Series	PY2 / SanMotion P
Alias	PY2A030A2; PY2A030
Amplifier Capacity	30 A
Motor Capacity Class	to about 1 kW
Control Function	velocity, torque, or position via parameters
Control Method	IGBT PWM, sine wave drive
Main Circuit Three Phase	200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Main Circuit Single Phase	200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Control Circuit	single-phase 200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Operating Ambient	0 to 55 C
Storage Temperature	-20 to +65 C
Humidity	90 percent RH maximum no condensation
Altitude	up to 1000 m
Vibration	0.5 G, 10 to 55 Hz, 2 hours X/Y/Z
Shock	2 G
Mass	2.0 kg
Velocity Control Range	1:5000
Load Variation	+/-0.1 percent max / max speed (0 to 100 percent)
Voltage Variation	+/-0.1 percent max / max speed (170 to 253 V)
Temperature Variation Velocity	+/-0.5 percent max / max speed (0 to 55 C)
Frequency Characteristics	400 Hz (JL = JM)
Dynamic Brake	built-in

PARAMETER	VALUE
Regenerative	circuit built-in; resistor optional (not built-in on PY2A030)
Regen Resistance Table	50 ohm for PY2A030 / PY2E030
Monitor Reference Regen	5 W or 10 W per Func2 bit 4
Velocity Monitor	0.5 V +/-20 percent at 1000 min-1
Current Monitor	0.5 V +/-20 percent at 100 percent
Command Voltage	+/-2.0 VDC at 1000 min-1 (max +/-10 V)
Inrush Main Circuit	40 A (0-P) within 600 ms after power on (with *1 note)
Cooling	forced air (30 A and 50 A)
Volume Versus PY	about 65 percent smaller (PY2A030 to 1 kW)
LED Display	internal status and alarms
Protection	overcurrent, overload, overheat, overspeed, sensor, open-phase, regen, CPU, and related faults
Example Motor	P30B06040D 1.0 kW class combination
Interface Letters Family	S speed, T torque, P position, X/Y/U switch types
Output Voltage Listing	0 to 365 V (distributor)
Output Current Listing	5.2 A (distributor)
PWM Listing	20.8 kHz (distributor)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	20 to +65 C
Humidity	90 percent RH maximum no condensation
Altitude	up to 1000 m
Vibration	0.5 G, 10 to 55 Hz, 2 hours X/Y/Z
Shock	2 G
Mass	2.0 kg
Velocity Control Range	1:5000
Load Variation	+/-0.1 percent max / max speed (0 to 100 percent)
Voltage Variation	+/-0.1 percent max / max speed (170 to 253 V)
Temperature Variation Velocity	+/-0.5 percent max / max speed (0 to 55 C)
Frequency Characteristics	400 Hz (JL = JM)
Dynamic Brake	built-in
Regenerative	circuit built-in; resistor optional (not built-in on PY2A030)
Regen Resistance Table	50 ohm for PY2A030 / PY2E030
Monitor Reference Regen	5 W or 10 W per Func2 bit 4
Velocity Monitor	0.5 V +/-20 percent at 1000 min ⁻¹
Current Monitor	0.5 V +/-20 percent at 100 percent
Command Voltage	+/-2.0 VDC at 1000 min ⁻¹ (max +/-10 V)
Inrush Main Circuit	40 A (0-P) within 600 ms after power on (with *1 note)
Cooling	forced air (30 A and 50 A)
Volume Versus PY	about 65 percent smaller (PY2A030 to 1 kW)
LED Display	internal status and alarms
Protection	overcurrent, overload, overheat, overspeed, sensor, open-phase, regen, CPU, and related faults
Example Motor	P30B06040D 1.0 kW class combination
Interface Letters Family	S speed, T torque, P position, X/Y/U switch types

PARAMETER	VALUE
Output Voltage Listing	0 to 365 V (distributor)
Output Current Listing	5.2 A (distributor)
PWM Listing	20.8 kHz (distributor) Notes Specs from Sanyo Denki PY2 servo amplifier instruction manual Table 9-1 and PY2A030A2 listings. Distributor 0-365 V / 5.2 A / 20.8 kHz should be confirmed on the nameplate versus the manual combination table. Confirm motor/encoder parameters after replacing A2 units.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Technical Specifications	
PARAMETER	VALUE
Model	PY2A030A2
Manufacturer	Sanyo Denki
Instrument Type	AC Servo Amplifier
Series	PY2 / SanMotion P
Alias	PY2A030A2; PY2A030
Amplifier Capacity	30 A
Motor Capacity Class	to about 1 kW
Control Function	velocity, torque, or position via parameters
Control Method	IGBT PWM, sine wave drive
Main Circuit Three Phase	200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Main Circuit Single Phase	200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Control Circuit	single-phase 200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Operating Ambient	0 to 55 C
Storage Temperature	-20 to +65 C
Humidity	90 percent RH maximum no condensation
Altitude	up to 1000 m
Vibration	0.5 G, 10 to 55 Hz, 2 hours X/Y/Z
Shock	2 G
Mass	2.0 kg
Velocity Control Range	1:5000
Load Variation	+/-0.1 percent max / max speed (0 to 100 percent)
Voltage Variation	+/-0.1 percent max / max speed (170 to 253 V)
Temperature Variation Velocity	+/-0.5 percent max / max speed (0 to 55 C)
Frequency Characteristics	400 Hz (JL = JM)
Dynamic Brake	built-in

PARAMETER	VALUE
Regenerative	circuit built-in; resistor optional (not built-in on PY2A030)
Regen Resistance Table	50 ohm for PY2A030 / PY2E030
Monitor Reference Regen	5 W or 10 W per Func2 bit 4
Velocity Monitor	0.5 V +/-20 percent at 1000 min-1
Current Monitor	0.5 V +/-20 percent at 100 percent
Command Voltage	+/-2.0 VDC at 1000 min-1 (max +/-10 V)
Inrush Main Circuit	40 A (0-P) within 600 ms after power on (with *1 note)
Cooling	forced air (30 A and 50 A)
Volume Versus PY	about 65 percent smaller (PY2A030 to 1 kW)
LED Display	internal status and alarms
Protection	overcurrent, overload, overheat, overspeed, sensor, open-phase, regen, CPU, and related faults
Example Motor	P30B06040D 1.0 kW class combination
Interface Letters Family	S speed, T torque, P position, X/Y/U switch types
Output Voltage Listing	0 to 365 V (distributor)
Output Current Listing	5.2 A (distributor)
PWM Listing	20.8 kHz (distributor)

Specifications

PARAMETER	VALUE
Model	PY2A030A2
Manufacturer	Sanyo Denki
Instrument Type	AC Servo Amplifier
Series	PY2 / SanMotionPAliaS: PY2A030A2; PY2A030
Amplifier Capacity	30 A
Motor Capacity Class	to about 1 kW
Control Function	velocity, torque, or position via parameters
Control Method	IGBT PWM, sine wave drive
Main Circuit Three Phase	200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Main Circuit Single Phase	200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Control Circuit	single-phase 200 to 230 VAC +10 percent / -15 percent, 50/60 Hz +/-3 Hz
Operating Ambient	0 to 55 C
Storage Temperature	-20 to +65 C

PARAMETER	VALUE
Humidity	90 percent RH maximum no condensation
Altitude	up to 1000 m
Vibration	0.5 G, 10 to 55 Hz, 2 hours X/Y/Z
Shock	2 G
Mass	2.0 kg
Velocity Control Range	1:5000
Load Variation	+/-0.1 percent max / max speed (0 to 100 percent)
Voltage Variation	+/-0.1 percent max / max speed (170 to 253 V)
Temperature Variation Velocity	+/-0.5 percent max / max speed (0 to 55 C)
Frequency Characteristics	400 Hz (JL = JM)
Dynamic Brake	built-in
Regenerative	circuit built-in; resistor optional (not built-in on PY2A030)
Regen Resistance Table	50 ohm for PY2A030 / PY2E030
Monitor Reference Regen	5 W or 10 W per Func2 bit 4
Velocity Monitor	0.5 V +/-20 percent at 1000 min-1
Current Monitor	0.5 V +/-20 percent at 100 percent
Command Voltage	+/-2.0 VDC at 1000 min-1 (max +/-10 V)
Inrush Main Circuit	40 A (0-P) within 600 ms after power on (with *1 note)
Cooling	forced air (30 A and 50 A)
Volume Versus PY	about 65 percent smaller (PY2A030 to 1 kW)
LED Display	internal status and alarms
Protection	overcurrent, overload, overheat, overspeed, sensor, open-phase, regen, CPU, and related faults
Example Motor	P30B06040D 1.0 kW class combination
Interface Letters Family	S speed, T torque, P position, X/Y/U switch types
Output Voltage Listing	0 to 365 V (distributor)
Output Current Listing	5.2 A (distributor)
PWM Listing	20.8 kHz (distributor)

Notes

Specs from Sanyo Denki PY2 servo amplifier instruction manual Table 9-1 and PY2A030A2 listings. Distributor 0-365 V / 5.2 A / 20.8 kHz should be confirmed on the nameplate versus the manual combination table. Confirm motor/encoder parameters after replacing A2 units.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.