

IOP301

IOP301 Isolated Analog Input Module

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METSO IOP301 is a 16-channel isolated analog input module for the maxPAC and maxDNA Model IOP architecture. It accepts documented current or voltage field inputs with isolation between the field side and logic.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	IOP301
Manufacturer	METSO
System family	Metso maxPAC Model IOP I/O
Record scope	Installation, application and verification

1

PLAN

2

ISOLATE

3

CONNECT

4

CONFIGURE

5

TEST

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01 PRE-INSTALLATION PLAN

- 1

Confirm IOP301 and the 69230 I301A assembly identity.
- 2

Place the maxDNA process and affected loops in the approved maintenance state.
- 3

Record all sixteen channel types, ranges, wiring and redundancy assignments.
- 4

Isolate backplane and field-loop power before removing the module.
- 5

Preserve external shunts, transmitter supplies and terminal polarity.

MATCHED HARDWARE

- METSO IOP301 with exact visible identity
- Matched Metso maxPAC Model IOP I/O host
- Documented power, field and communication interfaces
- Approved configuration and acceptance record

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	IOP301 recorded
Physical interface	Installed terminals, ports and signals matched to the as-found record
Configuration	Approved host and channel configuration restored
Functional proof	Controlled test confirms isolated acquisition of sixteen current or voltage process signals

02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Product type	Isolated analog input module
I/O system	Metso maxPAC Model IOP
Module type	IOP301
Referenced assembly number	69230 I301A
Channels	16 analog inputs
Supported signal forms	Current or voltage input
Conversion accuracy	15-bit plus sign bit
Scanning time	100 ms
Isolation	Field-to-logic optical isolation
Channel grouping	Optical isolation between each pair of channels
System loop supply	24 V available from the backplane for supported transmitter circuits
Current-input arrangement	Supports external shunt configuration
Voltage-input arrangement	Channel configured for voltage input when the documented shunt condition is met

RELATED PRODUCT PAGES

1

Siemens 6SE6440-2UD31-1CA1

2

Siemens
39EAMCBN-A5E00282025-05

3

Siemens 39VIMCCN-A5E00282175-07

4

Siemens 6SL3210-5FB10-4UF1

5

Siemens C98043-A7105-L4-9

6

Siemens 6SE7090-0XX84-3DB1

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Siemens 6SL3352-1AE37-5BA1

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Siemens 6SL3351-1AE37-5BA1

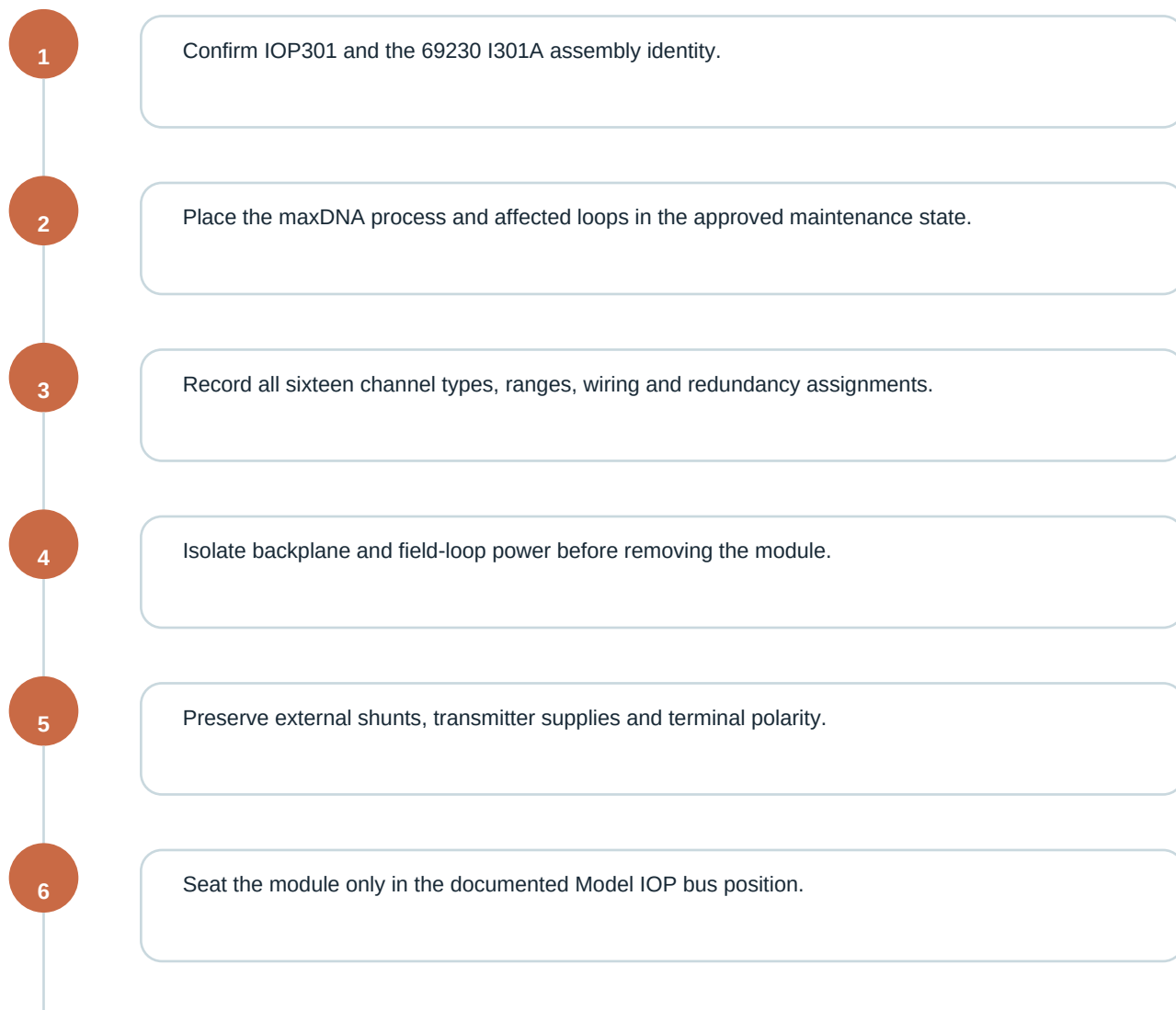
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Siemens 6SL3350-6TK00-0BA0

FIELD NOTE

Confirm IOP301, its exact Metso maxPAC Model IOP I/O role, installed position, power, interfaces, configuration, diagnostics and controlled acceptance evidence before release.

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	IOP301
Physical interface	Installed terminals, ports and signals matched to the as-found record
Configuration	Approved host and channel configuration restored
Functional proof	Controlled test confirms isolated acquisition of sixteen current or voltage process signals

04 RETURN-TO-SERVICE RECORD

- ☐ Preserve external shunts, transmitter supplies and terminal polarity.
- ☐ Seat the module only in the documented Model IOP bus position.
- ☐ Restore configuration and review module, bus and channel diagnostics.
- ☐ Apply controlled current or voltage signals and verify every assigned channel.

VERIFICATION RECORD

PRODUCT IDENTITY	IOP301
INSTALLED POSITION	Documented Metso maxPAC Model IOP I/O position
VERIFICATION METHOD	Controlled inspection and functional test
RELEASE RECORD	Final diagnostic state retained before service

FUNCTIONAL ACCEPTANCE CHECKLIST

- ☐ Preserve external shunts, transmitter supplies and terminal polarity.
- ☐ Seat the module only in the documented Model IOP bus position.
- ☐ Restore configuration and review module, bus and channel diagnostics.
- ☐ Apply controlled current or voltage signals and verify every assigned channel.

SOURCE IDENTIFIERS

Metso Automation maxPAC Hardware Reference Guide 278596 and user-authorized maxDNA overview | User-authorized Scribd references for exact IOP301 data