MU-TLPA02 51309204-125

Low-Level Multiplexer Power Adapter

Honeywell MU-TLPA02 51309204-125 is the nonconformally coated, CE-compliant power adapter connecting LLMux temperature FTAs to a Process Manager family multiplexer IOP.

Identify the temperature acquisition chain

Processor	MU-PLAM02 LLMux IOP
Adapter	MU-TLPA02 51309204-125, nonconformally coated CE execution
RTD termination	MU-TAMR03
Local-reference thermocouple termination	MU-TAMT03
Remote-reference thermocouple termination	MU-TAMT13

Plan the two cable domains

IOP to adapter	Maximum 50 m. Identify cabinet boundaries before choosing internal MU-KFTAxx or shielded external MU-KFTSxx cable.
Adapter to FTA	Maximum 305 m. Keep the actual longest field-side route within its independent limit.
Local FTA cable	51304465-xxx with two individually shielded twisted pairs. Document the installed shield landings.
CE review	Verify CE-compliant card file, specified external cabling and grounded enclosure together.

Controlled replacement sequence

Capture	Photograph the complete adapter identity, processor-side cable and both FTA branches. Label conductors and shield landings.
Prepare	Apply the approved plant isolation and I/O service procedure. Establish how temperature indications and process control are managed during the outage.
Compare	Check board revision, terminals and nonconformally coated construction against the removed assembly. Resolve any mismatch before connection.
Reconnect	Restore each branch to its recorded destination, with shield grounding appropriate to the installation compliance basis.
Prove	Confirm representative RTD or thermocouple indications on each connected FTA group against the accepted baseline.

Installation precautions

Identify the LLMux architecture	Confirm that both termination and processor assemblies are LLMux components before disconnection.
Record every cable destination	Photograph the IOP-side and both FTA-side connections, labels and shield landings.
Check the longest IOP route	Include the complete installed processor-to-adapter cable in the 50 m limit.
Verify field-side reach	Keep the longest adapter-to-FTA connection within 305 m using the specified cable.
Restore CE shielding	For a CE installation, restore the specified shielded cable and both-end grounding of local FTA cables.
Inspect the remote enclosure	Confirm the grounded mounting channel, safety-ground connection and upright FTA installation before returning channels to service.

Branch diagnosis and acceptance

One FTA group abnormal	Inspect the affected branch cable, terminal identity and FTA configuration. Compare with the working branch before changing the common adapter.
Both groups abnormal	Review the shared processor-to-adapter path and adapter connections under the approved service procedure.
Thermocouple offset after service	Confirm that the original local or remote cold-junction reference arrangement and its wiring were restored.
CE grounding discrepancy	Resolve shield and safety-ground landings against the approved installation record before accepting the restored arrangement.
Final evidence	Retain adapter revision, IOP and FTA identities, cable-route lengths, shield landings and representative sensor readings.

Assembly selection boundaries

Coating distinction	51309204-125 is the nonconformally coated CE execution. The 51309204-175 assembly is the conformally coated execution.
Two independent distance checks	Apply the 50 m IOP-side limit and 305 m FTA-side limit to their respective cable routes.
CE installation relationship	The adapter identity alone does not establish compliance. Review the card file, cable selection, shielding and enclosure grounding together.

Technical limits for field review

Connected FTAs	2 maximum in the documented configuration
Channels per FTA	16
System input capacity	32 channels with two FTAs
Maximum IOP-to-adapter cable	50 m
Maximum adapter-to-FTA cable	305 m
Adapter-side local cable connector	6 pins
FTA-side local cable connector	4 or 6 pins
Local cable construction	2 individually shielded twisted pairs

Related Honeywell product references

Review the complete assembly identity and installed-system application for each reference.

Honeywell MU-PLAM02 51304362-100

Honeywell MU-TAMR03 51309218-125

Engineering contact



Discuss the exact marking and installed temperature-input architecture with Apter Power.
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Technical basis

Honeywell HPM Planning, March 1998, LLMux configuration and placement