

# ABB FEN-01 68679273

Encoder Interface & Wiring Reference

Two TTL inputs, encoder output and position-latch capture



|                               |                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------|
| ABB product / lookup identity | FEN-01 68679273                                                                    |
| Document scope                | Independent Apter Power reference compiled only from the cited ABB public sources. |
| Image policy                  | No product photograph is included in this document.                                |



Apter Power product page  
<https://www.apterpower.com/ABB/fen-01-68679273>

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# Before work begins

This checklist does not replace the current ABB host-equipment manual. It separates published facts from project-specific information that must be verified on the installed system.

|   |                                                                                                   |
|---|---------------------------------------------------------------------------------------------------|
| 1 | Confirm the physical nameplate and current ABB order code; ABB's current public code is 68805422. |
| 2 | Select 5.5 V or 24 V encoder supply correctly before connecting the encoder.                      |
| 3 | Verify X31, X32, X33 and X34 connector assignments against the FEN-01 user's manual.              |
| 4 | Keep the differential encoder channel frequency at or below ABB's 500 kHz limit.                  |
| 5 | Confirm drive, control-unit, option-slot and FEA-03 support in the relevant drive manual.         |
| 6 | Do not assume FEN-11, FEN-21 or FEN-31 is interchangeable; their feedback technologies differ.    |

## Identity controls

| Official parameter     | Published value                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Complete code          | FEN-01 68679273                                                                                             |
| Model / lookup label   | FEN-01                                                                                                      |
| Documented role        | TTL encoder interface for ABB drives                                                                        |
| Canonical product page | <a href="https://www.apterpower.com/ABB/fen-01-68679273">https://www.apterpower.com/ABB/fen-01-68679273</a> |

# Signal and component verification

|   |                                                                                          |
|---|------------------------------------------------------------------------------------------|
| 1 | A supported drive option slot or approved FEA-03 adapter supplies the module connection. |
| 2 | X31 accepts differential A/B/Z; X32 accepts A/B/Z plus U/V/W commutation and PTC input.  |
| 3 | The drive uses encoder feedback for closed-loop speed and position functions.            |
| 4 | X33 can echo or emulate A/B/Z, while X34 captures two position-latch events.             |

## System context

|                                                                   |                                                               |
|-------------------------------------------------------------------|---------------------------------------------------------------|
| TTL encoder on X31 or X32                                         | Supported ACS850, ACS880 or DCS880 drive                      |
| FEA-03 option extension adapter where the drive manual permits it | X33 encoder echo / emulation recipient                        |
| X34 position-latch signals                                        | 5.5 V or 24 V encoder supply selected per wiring requirements |

## Release decision

Release the equipment for installation or commissioning only after the complete ABB identity, host-system documentation, connector assignments, supply conditions and applicable lifecycle or migration instructions have been checked. Unpublished values must not be inferred from similar ABB revisions.

## Official ABB sources

|                                           |                                                                                                                                                                                         |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ABB FEN-01 product record                 | <a href="https://www.abb.com/global/en/products/68805422">https://www.abb.com/global/en/products/68805422</a>                                                                           |
| FEN-01 User's Manual, 3AFE68784603 Rev. C | <a href="https://library.e.abb.com/public/9ccad0f8311244488590ad0d6cf26564/en_FEN_01_um_C.pdf">https://library.e.abb.com/public/9ccad0f8311244488590ad0d6cf26564/en_FEN_01_um_C.pdf</a> |



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