

ASCO Series 300 Group G Controller

Standard Operational Features, Controls and Status Indicators

Standard Selectable Features

- Inphase monitor to transfer motor loads, without any intentional off time, to prevent inrush currents from exceeding normal starting levels.
- Engine Exerciser to automatically test backup generator each week-with or without load 20 minutes not adjustable.
- Commit to transfer
- Selective load disconnect control contacts (two provided) which operate with time delay prior to and/or after load transfer and re-transfer.
- 60Hz or 50Hz selectable switch.
- Three – phase/single – phase selectable switch.

124* 64 Graphical LCD Display/LED Indicators

- Switch position green LED for normal
- Switch position red LED for emergency
- Source availability green LED for normal
- Source availability red LED for emergency
- “Not in Auto” amber LED
- Common Alarm amber LED
- Soft key for transfer test function
- Soft key for time delay bypass
- Set Engine Exerciser
- Selection of non – automatic operation
- Scroll, Up/Down Arrows
- Escape key
- Enter key

Voltage & Frequency Sensing

- Three phase under and over voltage sensing on normal, and single phase on emergency
- True RMS voltage sensing with +/- 1% accuracy
- Selective settings: single or three phase voltage sensing on normal and single phase sensing on emergency; 50 or 60Hz
- Frequency sensing accuracy is +/- 0.1Hz
- Under and over frequency settings on normal and emergency
- Voltage and frequency parameters adjustable in 1% increments

- Normal source pickup voltage adjustment range is 85 – 100%; drop - out voltage adjustment range is 70 – 98% in 1% increments
- Emergency source pickup voltage adjustment range is 85 – 100%; drop - out voltage adjustment range is 70 – 98% in 1% increments
- Normal source pickup frequency adjustment range is 86 – 100%; drop – out adjustment range is 85 – 98% in 1% increments
- Emergency source pickup frequency adjustment range is 86 – 100%; drop – out adjustment range is 85 – 98% in 1% increments
- Over voltage and over frequency reset is fixed at 2% below the trip setting

Time Delays

- Engine start time delay – delays engine starting signal to override momentary normal source outages – adjustable 0 to 6 seconds (Feature 1C)
- Transfer to emergency time delay – adjustable 0 – 60 minutes (Feature 2B)
- Emergency source stabilization time delay to ignore momentary transients during initial generator set loading – adjustable 0 to 4 seconds (Feature 1F)
- Re-transfer to normal time delay – adjustable 0 to 10 hours (Feature 3A)
- Unloaded running time delay for engine cooldown – adjustable 0 to 60 minutes (Feature 2E)
- Pre and post signal time delay for selective load disconnect with a programmable bypass on source failures – adjustable 0 to 5 minutes (Optional feature 31Z)
- Fully programmable engine exerciser seven independent routines to exercise the engine generator, with or without loads, on a daily, weekly. Bi weekly or monthly basis (Optional feature bundle 11BE)
- Delayed transition load disconnect time delay – adjustable 0 to 5 minutes

Standard Control Contacts

- Switch position indicating contacts (rated 10 amps 250VAC, 32VDC) (1) for normal position (1) for emergency position

Remote Control Features – external inputs for connecting:

- Remote test switch
- Remote contact for test or for peak shaving applications. If emergency source fails, switch will automatically transfer back to normal source if acceptable
- Inhibit transfer to emergency
- Remote time delay bypass switch emergency to normal

Electromagnetic Compliance Testing (EMC)

- IEC 61000 – 4 – 2 Electrostatic Discharge Immunity
- IEC 61000 – 4 – 3 Radiated RF Field Immunity
- IEC 61000 – 4 – 4 Electrical Fast Transient/Burst Immunity
- IEC 61000 – 4 – 5 Surge Immunity
- IEC 61000 – 4 – 6 Conducted RF Immunity
- CISPR 11 – Conducted RF Emissions and Radiated RF Emissions
- FCC CFR 47 Part 15

Additional Design Criteria

- NEMA ICS-109.21 Impulse Withstand Test
- Digital circuitry isolated from line voltages
- Isolated RS – 485 Serial Communications Port (Accessory 11BE Bundle)
- Connectivity Module for remote monitoring and control (Accessory 72EE)