



Commissioning status – Power Converters NA YETS23-24

EATM 12/03/2024

X.Genillon, Y.Gaillard



EDMS [3061082](#)

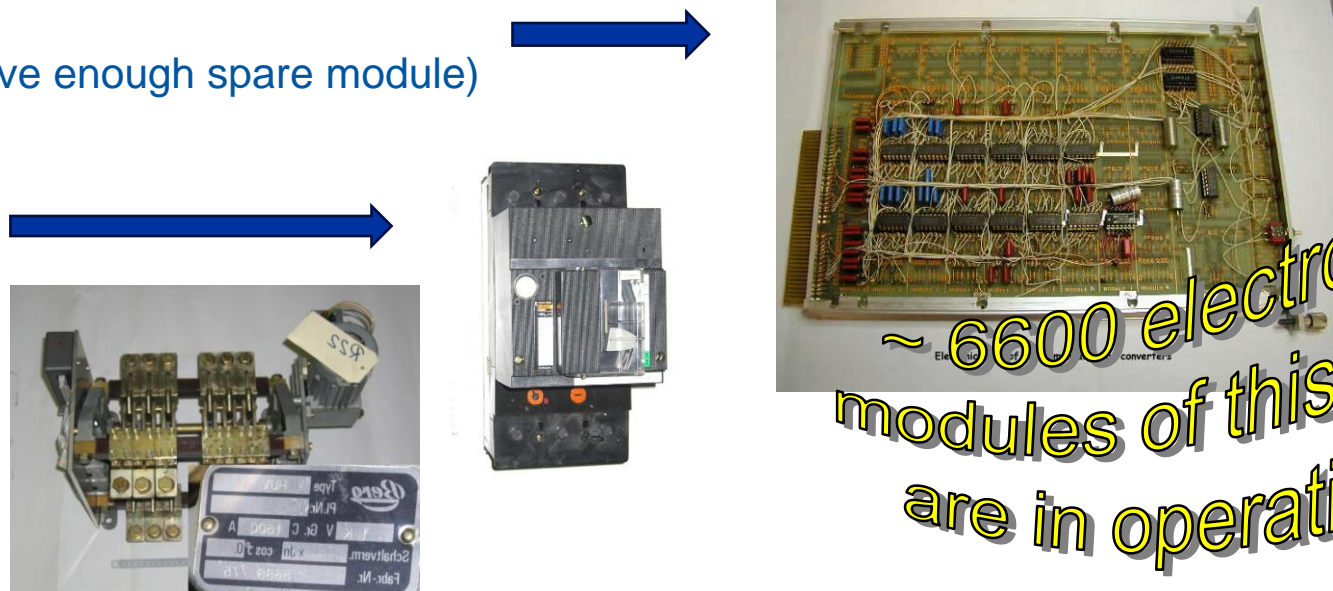
Summary of startup NA power converters after YETS23-24

After an extensive preventive maintenance program carried out during YETS 23-24 on the electronic cards (capacitors and IC replacement), all the power converters were tested:

- ✓ 273 power converters fully tested individually according to a rigorous procedure [EDMS2823617](#)
- ✓ 18 power converters of NP02 and NP04 tested at 100A
- Spectrometers successfully tested: SM1, SM2, MNP22, MNP33, GOLIATH/DAVID, ATLAS/MORPURGO used for MAD-MAX experiment
- Start-up period:
 - ✓ 05/02/2024 to 01/03/2023 (4 weeks)
 - ✓ Tests completed on schedule
- Good collaboration between coordination team, TE/MSC and SY/EPC.
- Still to be done: Testing NP02 and NP04 power converters at full current
Testing VERTEX power converters when the magnets will be cold

Technical problems encountered during startup:

- ✓ Many auxiliary circuit breakers, hall probes, relays, electronic crates,...have been replaced.
- ✓ 80 electronic modules changed
(that we need to troubleshoot, we have enough spare module)
- ✓ 8 Main circuit breakers replaced
(to be fixed)
- ✓ 1 Polarity switch
(to be fixed)



Many thanks to our first line team who were in charge of these tests