Revamping reference list

Year	Job No.	Country	Job ref.	Description
2023	V23167	Philippines	E513	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 1900A - 200V
2023	V23144	Indonesia	Existing plant not supplied by FRIEM	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 20kA - 125V
2023	V23130	Italia	E568	1 Polarizer rectifier rated 280V - 100A DC
2023	V23127	Brazil	E566	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 60kA - 230V
2023	V23117	France	E447 (2007)	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 135kA - 70V
2023	V23111	Singapore	E369 (1997)	Revamping of 1 control unit with digital regulation DRP7.0 and PLC based control system Rating of the rectifier: 16kA - 680V
2023	V23070	Spain	E602 (2016)	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 18kA - 370V
2023	V23065	Peru	E438 (2007)	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 25kA - 460V
2023	V23056	Saudi Arabia	E375 (1998)	Revamping of No. 2 control unit with digital regulation DRP7.0 and PLC based control system Rating of the rectifier: 24kA - 200V
2023	V23026	USA	E505 (2011)	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 16kA - 586V and Partial Revamping of 1 Polarization unit with digital regulation DRP7.0 rated: 416V - 30A
2023	V23018	Greece	E556 (2014)	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 20kA - 175V
2023	V23006	Italy	E559 (2014)	Supply of No.1 Premagnetazation unit
2022	V22185	Austria	E499	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 15kA - 320V
2022	V22155	Korea	E354 (1995)	Revamping of N.2 control units with digital regulation for saturable reactors and PLC based control system. Upgrade of No. 2 master control systems. (180 kA - 420V each)
2022	V22154	Singapore	E373 (1993)	Tranformer Replacement 17816 kV/A

Revamping reference list

Year	Job No.	Country	Job ref.	Description
2022	V22132	Quwait	E638	Revamping of N.2 control units with digital regulation for saturable reactors and PLC based control system. Upgrade of No. 2 master control systems. (180 kA - 420V each)
2022	V22130	Korea	E381 (1998)	Revamping of N.2 control units with digital regulation for saturable reactors and PLC based control system. Supply of No. 2 master control systems. Supply of No. 2 Cooling system: (11 kA - 350V)
2022	V22112	USA	Existing plant not supplied by FRIEM	2 Polarizers rectifier rated 530V, 100A DC each & 2 Polarizers rectifier rated 256V, 50A DC each
2022	V22098	Colombia	Existing plant not supplied by FRIEM	Polarizer rectifier rated 305V, 50A DC
2022	V22097	Brazil	E493 (2011)	2 Polarizers rectifier rated 240V, 50A DC each
2022	V22085	Mexico	Existing plant not supplied by FRIEM	Revamping of 1 control unit with digital regulation DRP7.0 and PLC based control system Rating of the rectifier: 20kA - 140V
2022	V22067	Norway	E433 (2006)	Revamping of 1 control unit with digital regulation DRP7.0 and PLC based control system. Rating of the rectifier: 30kA - 600V
2022	V22065	Italy	E492 (2011)	Revamping of 2 cooling section for 2 thyristor rectifier rated: 118kA - 300V DC each
2022	V22054	Peru	Existing plant not supplied by FRIEM	Revamping of 1 control unit with digital regulation DRP7.0 and PLC based control system Rating of the rectifier: 30kA - 250V
2022	V22047	Chile	Existing plant not supplied by FRIEM	Polarizer rectifier rated 218V, 600A DC
2022	V22046	Chile	Existing plant not supplied by FRIEM	Revamping of 1 control unit with digital regulation DRP7.0 and PLC based control system Rating of the rectifier: 83kA - 266V
2022	V22040	Peru	E504 (2011)	Upgrade of polarized E504
2022	V22001	Singapore	E373 (1993)	Revamping of 1 control unit with digital regulation DRP7.0 and PLC based control system Rating of the rectifier: 18kA - 850V

Revamping reference list

Year	Job No.	Country	Job ref.	Description
2021	V21232	Germany	E414 (2004)	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 30kA - 450V
2021	V21215	Spain	E391 (2001)	Partial Revamping of 1 control unit PLC based control system Rating of the rectifier: 20kA - 30V
2021	V21139	Finland	E661 (2019) E637 (2018)	Partial Revamping of 1 control unit with digital regulation DRP7.0 Rating of the rectifier: 30kA - 450V
2021	V21133	Chile	Existing plant not supplied by FRIEM	Revamping of 1 control unit with digital regulation DRP7.0 and PLC based control system Rating of the rectifier: 45kA - 400V
2021	V21114	Pakistan	E420 (2005)	Polarizer rectifier rated 450V- 50A
2021	V21103	Cile	Existing plant not supplied by FRIEM	Revamping of 2 control unit with digital regulation DRP7.0 and PLC based control system. Rating of the rectifier: 40kA - 100V
2021	V21066	Peru	E504 (2011)	Polarizer rectifier rated 650V - 50A with digital regulation DRP7.0
2021	V21057	Peru	E446 (2008)	Revamping of Rectifier power section rated 120kA - 360V
2020	V20125	Malaysia	E471(2009)	Polarizer rectifier rated 230V, 50A DC
2020	V20124	Malaysia	E511(2012 E526(2013)	Upgrade of polarized E511-E526
2020	V20042	Norvegia	Existing plant not supplied by FRIEM	Revamping of control and regulation cubicle for a diode rectifier rated 28kA - 600V
2020	V20038	Indonesia	E365 (1996)	Revamping of control regulation cubicle for a thyristor rectifier rated 45kA-474V
2019	V19071	Canada	Existing plant not supplied by FRIEM	Revamping of Control and regulation cubicle for a thyristor rectifier rated 9kA - 170V
2019	V18331	Poland	E387 (2000)	Revamping of Rectifier power section rated 2 x 40kA - 415V
2019	V18298	Norway	E368 (1997)	Revamping of N.1 control unit (original plant not supplied by FRIEM) with digital regulation and PLC based control system Rating of the rectifier: 42kA – 120V

Revamping reference list

Year	Job No.	Country	Job ref.	Description
2019	V18291	South Korea	E367 (1997)	Revamping of N.1 control unit (original plant not supplied by FRIEM) with digital regulation and PLC based control system Rating of the rectifier: 30kA – 600V
2018	V18088	Spain	E312 (1991)	Revamping of N.1 control unit (original plant not supplied by FRIEM) with digital regulation and PLC based control system Rating of the rectifier: 45kA – 450V
2018	V18042	Spain	E280 (1988)	Revamping of N.2 control unit with digital regulation and PLC based control system Rating of each rectifier: 30kA –300V
2018	V17348	Perù	E446 (2008)	Partial revamping of Rectifier power section rated 60kA - 360V
2017	V17060	Canada	Existing plant not supplied by FRIEM	Revamping of N.1 control unit (original plant not supplied by FRIEM) with digital regulation and PLC based control system Rating of the rectifier: 17kA – 600V
2017	V17002	Romania	E183 (1978)	Revamping of 2 control units with digital regulation for saturable reactors and PLC based control system. Supply of No. 1 master control system.
2016	V16164	Egypt	E400 E402 (2002)	Revamping of N.1 Control and regulation unit Rating of the existing plant: 2x(575V - 15kA)
2016	V16078	Indonesia	E318 (1992)	Revamping of N.1 control unit with digital regulation and PLC based control system. Rating of the rectifier: 48.75kA - 280V
2016	V16077	Indonesia	E365 (1996)	Revamping of N.1 control unit with digital regulation and PLC based control system Rating of the old rectifier: 2x(45.36 kA - 478V)
2014	V14237	Algeria	E475 (2009)	Upgrading of the FRIEM rectifier. Existing rectifier: 18700A - 440V Goal: 20000A - 410V
2014	V14203	Belgium	E287 (1989)	Revamping of 1 control unit with digital regulation and PLC based control system Rating of the rectifier: 56kA - 100V
2014	V14022	Indonesia	E353 (1995)	Revamping of N.2 control units with digital regulation for saturable reactors and PLC based control system. Supply of No. 2 master control systems. Rating of the rectifier system: 63kA - 130V

Revamping reference list

Year	Job No.	Country	Job ref.	Description
2014	V14004	Egypt	E400 E402 (2002)	Revamping of N.2 Control and regulation units. Rating of the rectifier system: 2x(575V - 15kA)
2014	V14004	Egypt	E400 E402 (2002)	Revamping of N.2 control and regulation units Rating of the rectifier system: 2x(575V - 15kA)
2013	V13099	Norway	E384 (1999)	Revamping of N.1 control unit with digital regulation and PLC based control system. Rating of the rectifier: 25kA - 300V
2013	V13066	Italy	E135 (1973) E286 (1989)	Revamping of N.2 control and regulation units Revamping of N.1 control and regulation unit
2013	V13035	Indonesia	E318 (1992)	Revamping of N.1 control unit with digital regulation and PLC based control system Rating of the rectifier: 17kA – 600V
2012	V12187	Spain	E280 (1988)	Revamping of N.3 polarization rectifier units, 6 pulse, eache rated 150A - 250V. Rating of the existing plant: 30000A - 300V
2012	V12105	Singapore	E369 (1997)	Replacement of the PLC system. Rating of the existing plant: 680V - 16000A
2012	V12100	Spain	E436 (2006)	Revamping of N.1 air/water heat exchanger. Rating of the existing plant: 31400A - 320V
2012	V12087	Romania	E182 (1978)	Revamping of N.2 control units with digital regulation for saturable reactors and PLC based control system. Supply of No. 2 master control systems. Rating of the rectifier system: 2x(75 kA - 480V)
2012	V12043	Korea	E431 (2006)	Revamping of saturable reactors control system. Rating of the existing plant: 90000A - 420V
2012	V12042	Korea	E354 (1995)	Replacement of N.2 PLC systems Revamping of N.2 cooling cabinets. Rating of the rectifier system: 2 x (90000A - 420V)
2011	V11068	Thailand	E362 (1997)	Revamping of N.1 control and regulation unit. Rating of the rectifier system: 70000A - 220V
2006	V06041	Italy	E356 (1995)	N.1 Control and regulation unit for the expansion of the existing plant
2005	V05089	Korea	E410 (2004) E419 (2005)	Design, manifacturing and supervision of the activities to convert the existing plant. Existing plant: 1000A - 15V Goal: 1200A - 40V

Revamping reference list

Year	Job No.	Country	Job ref.	Description
2005	V05068	Italy	E286 (1989)	Revamping of N.1 automatic regulator panel (PTC1150) for the rectifier unit rated 7500A - 700V
2005	V05042	Italy	E286 (1989)	Revamping of the power section of the thyristor rectifier cubicle rated 7500A – 700V
2004	V04041	Saudi Arabia	E328 (1993)	Revamping of N.1 air/sea water heat exchanger