

	Reference projects	No. CSV1
		Date 30-09-2016.

MAIN REFERENCES AVALON PARTNERS


US STEEL, Smederevo	Steel works	<p>Apsorption filter GTS 1: 9 MVar, fc=250 Hz, 6 kV.</p> <p>Apsorption filter GTS 1: 9 MVar, fc=350 Hz, 6 kV.</p>
US STEEL, Smederevo	Steel works	Retrofit of existing TCR facility 35 kV, 2 x 16 MVar.
HOLCIM Cement, Popovac	Cement	Resonance point frequency adaptor, TS 110/6 kV, 2.6 MVar
TERMOVENT, Bačka Topola	Steel foundry	Hybrid STATCOM 3 MVar / 10 kV , for arc furnace 5 MW.
Rudarski Basen BOR, RUDNICI BAKRA BOR, Bor	Copper mine	<p>Real time PFC (20 ms) of excavators at open pit mine Veliki Krivelj, 3 MVar, fc=189 Hz, 35 kV.</p> <p>Dynamic thyristor controlled PFC of 1.5 MW / 6 kV shaft elevator DC motor, 2.2 MVar, fc=189 Hz, 6 kV.</p> <p>PFC cubicle for pumping facility 900 kVar, 6 kV.</p> <p>PFC cubicle for transport belt system 600 kVar, 6 kV.</p>
GASPROM, Rafinerija nafte Pančevo	Oil refinery	<p>PFC cubicle TS 220/6 kV, section 1.1: 1800 kVar, 6 kV</p> <p>PFC cubicle TS 220/6 kV, section 1.2: 1400 kVar, 6 kV</p> <p>PFC cubicle TS 220/6 kV, section 2.1: 2100 kVar, 6 kV</p> <p>PFC cubicle TS 220/6 kV, section 2.2: 1600 kVar, 6 kV</p>
GASPROM, Rafinerija nafte Pančevo	Oil refinery	<p>PFC cubicle Blok 5, section 1.1, 2400 kVar, 6 kV</p> <p>PFC cubicle Blok 5, section 2.1, 2200 kVar, 6 kV</p>
KRONOSPAN, Lapovo factory	Woodworks	Detuned PFC cubicle 2.5 MVar / 10 kV, 189 Hz
ANSAL STEEL, Ljig	Steel foundry	Detuned PFC cubicle for induction oven 700 kVar / 0,4 kV, 134 Hz
JKP Beogradski vodovod i kanalizacija	Water utility	PFC cubicle at water factory Makiš: 900 kVar, 10 kV
Rudnik uglja PLJEVLJA, Pljevlja	Coal mine	Detuned PFC cubicle TS1, 35/6 kV, 1200 kVar, fc=189 Hz, 6 kV
Reference 2016 ENG.docx		1/6

	Reference projects	No. CSv1
		Date 30-09-2016.


		Detuned PFC cubicle TS2 35/6 kV, 2x1200 kVAr, fc=189 Hz, 6 kV
MESSER TEHNOGAS, Smederevo	Technical gases production	Detuned PFC cubicle for Oxygen liquifier 4.2 MW/6 kV, 1.3 MVAR, fc=189 Hz, 6 kV
MESSER TEHNOGAS, Kisikana Bor	Technical gases production	Detuned PFC cubicle for Oxygen compressor 3.6 MW/6 kV, 1.2 MVAR, fc=189 Hz, 6 kV
KOMBINAT ALUMINIJUMA, Podgorica	Aluminium production	Retrofit of the central PFC field, 36 MVAR, 110 kV
POLITIKA štamparija, Krnjača	Printing	Real time thyristor PFC roto printing press Trafo 1: 320 kVAr, fc=189 Hz, 0.4 kV Real time thyristor PFC roto printing press Trafo 2: 360 kVAr, fc=189 Hz, 0.4 kV
KNJAZ MILOŠ, Aranđelovac	Food industry / mineral water production	Dynamic thyristor PFC of PET blower PET1 line 360 kVAr, fc=189 Hz, 0.4 kV Dynamic thyristor PFC TS3 280 kVAr, fc=189 Hz, 0.4 kV Dynamic thyristor PFC TS4 320 kVAr, fc=189 Hz, 0.4 kV PFC cubicle TS5 550 kVAr, fc=189 Hz, 0.4 kV PFC cubicle TS6 420 kVAr, fc=189 Hz, 0.4 kV PFC cubicle TS2 320 kVAr, 0.4 kV
MK Grupa, Šećerana Kovačica	Food industry / sugar beat	Real time thyristor PFC of centrifugal sieves, 660 kVAr, fc=189 Hz, 0.4 kV
UMKA - fabrika kartona AD, Beograd	Pulp and paper	Real time thyristor PFC TS3, Trafo 1 320 kVAr, fc =189 Hz, 0.4 kV Real time thyristor PFC TS3, Trafo 2 320 kVAr, fc =189 Hz, 0.4 kV Real time thyristor PFC TS3, Trafo 3 360 kVAr, fc =189 Hz, 0.4 kV Real time thyristor PFC TS3, Trafo 4 360 kVAr, fc =189 Hz, 0.4 kV Real time thyristor PFC TS3, Trafo 5 360 kVAr, fc =189 Hz, 0.4 kV Real time thyristor PFC TS3, Trafo 6 320 kVAr, fc =189 Hz, 0.4 kV Real time thyristor PFC TS3, Trafo 7 7x320 kVAr, fc =189 Hz, 0.4 kV

	Reference projects	No. CSV1
		Date 30-09-2016.


EnergopET, Krnješevci	Plastic moulding	<p>Real time thyristor PFC TS1 20/0.4 kV: 420 kVAr, fc=189 Hz, 0,4 kV</p> <p>Real time thyristor PFC TS2 20/0.4 kV: 420 kVAr, fc=189 Hz, 0,4 kV</p> <p>Real time thyristor PFC TS3 20/0.4 kV: 380 kVAr, fc=189 Hz, 0,4 kV</p> <p>Real time thyristor PFC TS4 20/0.4 kV: 360 kVAr, fc=189 Hz, 0,4 kV</p>
TETRAPAK, Gornji Mllanovac	Printing	<p>Detuned PFC cubicle TS1, trafo 1: 400 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, trafo 2: 300 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, trafo 3: 350 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, trafo 4: 400 kVAr, fc=189 Hz, 0.4 kV</p>
JP POŠTE SRBIJE, Beograd	Office building	Detuned PFC cubicle Post Central br. 6: 325 kVAr, fc=189 Hz, 0.4 kV
LIVNICA LESKOVAC AD, Leskovac	Steel foundry	Detuned PFC of induction oven 2x500 kW: 2 x 480 kVAr, fc=154 Hz, 0.69 kV
Elektroprivreda Srbije, Beograd	Power utility	PFC of distribution transformers at national level 55 MVar, 0.4 kV
Elektrodistribucija Beograd, Beograd	Power utility	PFC of distribution transformers accross Belgrade city municipal grid 12 MVar, 0.4 kV
BALL PACKGAGING, Beograd	Packaging production	Detuned PFC cubicles 2x360 kVAr, fc=189 Hz, 0.4 kV
DELTA CITY SCHOPPING CENTER, Beograd	Shopping mall	<p>Detuned PFC cubicle GTS, Trafo 1: 325 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle GTS, Trafo 2: 325 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle GTS, Trafo 3: 325 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle GTS, Trafo 4: 325 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle GTS, Trafo 5: 325 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle GTS, Trafo 6: 325 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle GTS, Trafo 7: 325 kVAr, fc=189 Hz, 0.4 kV</p>
Hotel INTERCONTINENTAL, Beograd	Hotel	<p>PFC cubicle TS 10/0.4 kV, Trafo 1 400 kVAr, 0.4 kV</p> <p>PFC cubicle TS 10/0.4 kV, Trafo 2 400 kVAr, 0.4 kV</p> <p>PFC cubicle TS 10/0.4 kV, Trafo 3 400 kVAr, 0.4 kV</p> <p>PFC cubicle TS 10/0.4 kV, Trafo 4 400 kVAr, 0.4 kV</p>

	Reference projects	No. CSV1
		Date 30-09-2016.

GENEX apartmani, Beograd	Office building	<p>PFC cubicle GTS 10/0.4 kV, Trafo 1, 325 kVAr, 0.4 kV</p> <p>PFC cubicle GTS 10/0.4 kV, Trafo 2, 325 kVAr, 0.4 kV</p> <p>PFC cubicle GTS 10/0.4 kV, Trafo 3, 325 kVAr, 0.4 kV</p> <p>PFC cubicle GTS 10/0.4 kV, Trafo 4, 325 kVAr, 0.4 kV</p>
UŠĆE SCHOPPING CENTER, Beograd	Shopping mall	<p>Detuned PFC cubicle TS1, Trafo 1: 175 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, Trafo 2: 400 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, Trafo 3: 400 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, Trafo 4: 325 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, Trafo 5: 450 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS1, Trafo 6: 225 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, Trafo 7: 450 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, Trafo 8: 450 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, Trafo 9: 275 kVAr, $f_c=189$ Hz, 0.4 kV</p>
UŠĆE Poslovna Kula, Beograd	Office building	<p>Detuned PFC cubicle TS1: 325 kVAr, $f_c=189$ Hz, 0,4 kV</p> <p>Detuned PFC cubicle TS2: 325 kVAr, $f_c=189$ Hz, 0,4 kV</p> <p>Detuned PFC cubicle TS3: 325 kVAr, $f_c=189$ Hz, 0,4 kV</p>
Cementara HOLCIM, Popovac	Cement plant	<p>Detuned PFC cubicle TS1: 320 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, trafo 1: 320 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, trafo 2: 380 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, trafo 3: 320 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, kućni trafo: 225 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2, mlin uglja: 380 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS3, trafo 1: 200 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS3, kompresorska: 360 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS Polisius 1: 175 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS Polisius 2: 125 kVAr, $f_c=189$ Hz, 0.4 kV</p>
AIRPORT CITY BELGRADE, Beograd	Office building	<p>Detuned PFC cubicle TS 1100: 325 kVAr, $f_c=189$ Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS 1200: 325 kVAr, $f_c=189$ Hz, 0.4 kV</p>
Reference 2016 ENG.docx		4/6

	Reference projects	No. CSV1
		Date 30-09-2016.

		<p>Detuned PFC cubicle TS 1300: 275 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS 1400: 300 kVAr, fc=189 Hz, 0.4 kV</p>
FRIKOM AD, Beograd	Food industry / frozen food processing	<p>Detuned PFC cubicle TS1: 2 x 450 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2: 525 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS3: 2 x 375 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS4: 450 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS5: 4 x 375 kVAr, fc=189 Hz, 0.4 kV</p>
NARODNA BIBLIOTEKA SRBIJE, Beograd	Office building	Detuned PFC cubicle main substation: 325 kVAr, fc=189 Hz, 0.4 kV
PHARMA SWISS, Beograd	Pharmaceutical	<p>PFC cubicle, Trafo 1: 360 kVAr, 0.4 kV</p> <p>PFC cubicle, Trafo 2: 360 kVAr, 0.4 kV</p> <p>PFC cubicle, Trafo 3: 360 kVAr, 0.4 kV</p>
HLADNJAČA INEX, Grdeljevo	Food processing	Detuned PFC cubicle 475 kVAr, fc=189 Hz, 0.4 kV
HLADNJAČA SIROGOJNO, Rupeljevo	Food processing	Detuned PFC cubicle 550 kVAr, fc=189 Hz, 0.4 kV
HLADNJAČA STANIĆ, Latvica	Food processing	Dynamic thyristor PFC cubicle 280 kVAr, fc=189 Hz, 0.4 kV
RK Beograđanka	Office building	Detuned PFC cubicle 2x325 kVAr, fc=189 Hz, 0.4 kV
RK Dušanovac	Office building	Detuned PFC cubicle 175 kVAr, fc=189 Hz, 0.4 kV
MECAPLAST, Zrenjanin	Plastic moulding	<p>Detuned PFC cubicle TS1 650 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2 450 kVAr, fc=189 Hz, 0.4 kV</p>
PAPIRPAK, Preljina	Pulp and paper	<p>Detuned PFC cubicle TS1: 2 x 350 kVAr, fc=189 Hz, 0.4 kV</p> <p>Detuned PFC cubicle TS2: 2 x 225 kVAr, fc=189 Hz, 0.4 kV</p>
ALFAPLAM, Vranje	Metal works	Detuned PFC cubicle TS2: 2 x 375 kVAr, fc=189 Hz, 0.4 kV
MIVELA, Trstenik	Food industry	PFC cubicle GTS: 240 kVAr, 0.4 kV

	Reference projects	No. CSv1
		Date 30-09-2016.

MINISTARSTVO PRAVDE RS, Trgovinski sud, Beograd	Office building	PFC cubicle TS1:360 kVAr, 0.4 kV
MINISTARSTVO PRAVDE RS, Palata pravde, Beograd	Office building	PFC cubicle TS: 2 x 320 kVAr, 0.4 kV
KOMERCIJALNA BANKA, Upravna zgrada, Beograd	Office building	Detuned PFC cubicle GTS: 237.5 kVAr, fc=189 Hz, 0.4 kV
AD PIVARA TREBJESA, Nikšić	Food and beverages	PFC cubicle TS Nova: 2 x 300 kVAr, 0.4 kV
SWISSLION TAKOVO, Gornji Milanovac	Food and beverages	Detuned PFC cubicle Fruit processing substation: 175 kVAr, fc=189 Hz, 0.4 kV Detuned PFC Canned meat substation: 250 kVAr, fc=189 Hz, 0.4 kV
RADIO TELEVIZIJA SRBJE, Beograd	TV Broadcastin g	PFC cubicle Studio Košutnjak: 250 kVAr, 0.4 kV
VODA VRNJCI, Vrnjačka Banja	Food and beverages	PFC cubicle 2 x 280 kVAr, 0.4 kV