PRE-BID MEETING FOR "INTERNAL AND EXTERNAL ELECTRICAL WORK OF NEW IUCAA-2 BUILDING AT IUCAA, PUNE."

The Pre-bid meeting for the proposed "Internal and External Electrical work of New IUCAA -2 Building at IUCAA, Pune." was held on 27th March 2024 at 1100 hrs in Bhaskara 1. The following members were present:

- 1. Architect Rajeev Vishwasrao
- 2. Mr. Vikas Sanghavi-Electrical Consultant
- 3. Mr. Nitin Ohol
- 4. Mr. Hitesh Deshmukh
- 5. Mr.G.B. Gaikwad
- 6. Mr. M.S. Sahastrabudhe-Could not attend the meeting due to prior commitments.

A total of nine representatives from six parties have attended the meeting. The questions raised by the agencies were satisfactorily clarified by IUCAA. The queries with responses are enclosed in Annexure – I and the list of representatives is present in Annexure – II.

Hitesh Deshmukh

G.B. Gaikwad

Nitin Ohol 27.03.2024

Vikas Sanghavi

Signature attached an below.

Ar. Rajeev Vishwasrao

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The report of pre-bid may be approved.

/WX 28.3,24

Director

Annexure-I The following points were discussed in the Pre-Bid Meeting held on 27.03.2024 at 1100 hrs in Bhaskara–1.

Sr. No.	Name of the Agency	Query	Clarification given by IUCAA
1	Mr.S. V. Gaikwad M/s Royal Power Turnkey Implements Pvt Ltd. Pune 9503053700	1)The vendor should have completed min one similar Institutional Electrical project costing more than Rs 10 Crores in last five financial years-Please consider state Govt. similar work experience. 2)Payment terms: Kindly change the payment terms as follows a)85% after supply of material b)10% after installation	1)State Govt. similar type works are accepted 2)The payment terms are as per tender conditions only.
		c)05% after commissioning 3)PWD class A registration is not mandatory for the tender above Rs 1.5 Crores	PWD class registration is exempted as per PWD GR No: CAT/2017/PC08/EM-2 dated 27.09.2018. Hence it is not required.
2	Mr.Ashit Nayak M/s Tejas Electricals, Pune M 9822052049	1)BOQ Note 2 - The Contractor shall be responsible for obtaining all necessary statutory approvals, clearances, sanctions, drawing approvals, and getting actual connections & shall be included in respective item rates. Statutory fees to offices of government authorities MSEDCL, PWD, FIRE INSPECTOR, POLLUTION BOARD, MOEF shall be paid by the client on the production of receipts paid in the name of IUCAA.	Challans from respective authorities (only MSEDCL, PWD, Fire Department) will be produced by the Bidder in the name of IUCAA. The required statutory fees only above mentioned departments will be paid by the IUCAA.
	S	2)BOQ Note 2: Please confirm the scope for load sanction, load release & charging permission scope?	All Scope is in Bidder's scope

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		3) Please approve L&T make distribution board as L&T make's MCB, RCCB already mentioned in the make list. 4) Indoor touch proof required for RMU's HT cable termination, which is not available in the BOQ. Please confirm. 5) In BOQ- FP MCCB was mentioned for the Panels, but	Ok, It is as per approved makes As per MSEDCL approved, Consider Touch proof Indoor HT terminations 4 Pole MCCB, Amended SLD shall be uploaded on CPPP
		in SLD TPN MCCB was mentioned, please confirm.	portal.
		6) In the BOQ AMF & DG sysnch panel are mentioned separately, but in the SLD both AMF & Sysnch panels shown combinely. Please confirm.	Combined, As per SLD. DG Sets factory inspection before dispatch should be arranged. done. Load test at Factory and at site with 110% load bank of capacity of DG sets should be arranged by the bidder at his own cost.
		7)BOQ127-130 In BOQ- RCCB 30/100/300 mA mentioned. Kindly conform which sensitivity we should consider as the rates are different.	The detail sheet will attached separately.
3	Mr. Abhish Madhukumar M/s Concept Engineering Projects Pvt Ltd. M-9850829524		
1		1)BOQ1,2,3,4 : Point wiring length is not mentioned.	As per DSR specification it is 6 meter in length and for additional length 10 % rise.
2		For secondary wiring, there is no basis in DSR. Kindly confirm basis of rate.	As per DSR specification it is 6 meter in length and for additional length 10 % rise.
3		BOQ no. 38 - Only making trench is mentioned. Please clarify.	Scope of BOQ Item no. 38 is as per attached Technical Specifications – Electrical Page No. 184 & 185.
4		BOQ no. 41 - Kiosk will be as per MSEDCL Specifications.	As per MSEDCL Specifications and approval.
5		BOQ no. 42 - HT METER will be as per MSEDCL specs. What shall be accuracy class 0.5 or 0.2?	As per MSEDCL Specifications /approval.

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6	BOQ no. 45 - Document preparation & submission along with liaisoning expenses will be in our scope. Statuatory payments shall be directly paid by IUCAA to Govt. dept. We will facilitate co-ordination for the same.	All Scope is in Bidder's scope. Challans from respective authorities (only MSEDCL, PWD, Fire Department) will be produced by the Bidder in the name of IUCAA. The required statutory fees only above mentioned departments will be paid by the IUCAA.
7	BOQ no. 47 - Why outdoor type terminations are required? Touch proof indoor type to be used.	As per MSEDCL approved, Consider Touch proof Indoor HT terminations.
8	BOQ no. 54 to 70 - Are cable terminations included? Single/Double compressions glands to be considered? Qty. of terminations?	Yes. Please refer uploaded SLD & drawings.
9	BOQ no. 75 - IEC61439 is not applicable. BOQ is required. How many capacitor banks?	Eight different stages are as per BOQ. Power factor should be continuously maintained One on various load at all the time.
10	BOQ no. 154 & 155 - Whether Perforated / Ladder type to be considered? Accordingly price will vary.	Perforated Type tray.
11	BOQ no. 156 & 157 - As per vendors, Hot dip Galvanisation is not possible for 18 gauge GI sheet. Making 20mm collar is not possible for 18 gauge GI sheet.	As per tender BOQ & Specifications. As per tender BOQ & Specifications.
12	Miscellaneous points - Switchgear in BOQ & SLD are not matching in multiple panels. Please confirm whether to quote as per BOQ or as per SLD so that there is parity between vendor offers.	Please refer Panel details sheets which are uploaded on CPPP portal.
13	Miscellaneous points - Panel will be IEC61439 or IS 8623 ? Please confirm.	Panels should be IEC 61439 as per technical specifications.

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14	TECHNICAL	All type tests certificates should
14	SPECIFICATION FOR CABLES	be submitted with the Tender Technical Bid on CPPP portal.
	Point no. 16-3.1, 3.2, 3.3, 3.4	1
	- It is not possible to carry	
	out these tests for each	
	voltage class and for each	
	rating of short time withstand	
	current in presence of	
	purchaser. These are	
	generally type tested by	
	manufacturer before it comes	
	to distributors/dealers with	
	its certificates.	
15	TECHNICAL	All type tests certificates should
	SPECIFICATION	be submitted with the Tender
	11 KV Metering Kiosk	Technical Bid on CPPP portal.
	Point no. 1191.02 - It is not	1
	possible to carry out these	
	tests for each voltage class	
	and for each rating of short	
	time withstand currentin	
	prescence of purchaser.	
	These are generally type	
	tested by manufacturer	
	before it comes to	
	distributors/dealers with its	
	certificates.	
16	TECHINCAL BID Section-I	As per prevailing labour laws.
	Techincal Bid form	1 1
	Point-12: Valid Labour	
	License - Since this is not	
	civil work contract, not	
	applicable.	
	Please confirm.	
17	TECHINCAL BID	AS per GFR - The Minimum
	Section-II	turnover of the bidder shall not
	Point-3.5 - Annual turnover	be less than Rs.18 Crores
	criteria as requested in	(Indian Rupees Eighteen Crores
	Tender is very steep	only) per annum for minimum
	compared to the volume and	three years out of last five
	amount of work . You are	financial years.
	requested to revisit turnover	594
	criteria.	
18	Security Deposit - We will	Required BG from
1.5	be providing BG from	Nationalised Banks only as per
	internationally reputed Indian	tender conditions.
	Banks viz. HDFC, ICICI,	
	etc.	
	Please confirm.	

and of the stage.

	BG from Nationalised Banks	As per tender terms &
19	- For SD (5%) - We will be	conditions only.
	providing BG for same,	
	please confirm.	
	For PBG (3%) within 21	
	days from award of contract -	
	Please confirm if PBG can be	
	provided upon completion of	
	work.	
20	TECHINCAL BIDSection-II	As per tender terms &
20	Point-28 - 75% Adhoc	conditions only.
	payment is mentioned on	Conditions only.
	assessed RA bill from the	
	contractor. About balance	
	25% payment, is not	
21	specified.Please clarify.	Paguired As par tandar tarms
21	TECHINCAL BID	Required, As per tender terms
	Section-II	& conditions only.
	Point-30 : Contractor's All	
	Risk (CAR) Insurance Policy	
	- Generally applicable for	
	civil work & not applicable	
	in this case. Please clarify.	
22	TECHINCAL BID	Not Applicable
	Section-IV	
	Point-14: - The contractor	
-	shall comply with the	
	provision of the Apprentice	
	Act 1961 - Please clarify.	
23	TECHINCAL BID	Panels should be IEC 61439 as
	Section-V	per technical specifications. For
	Point-7.1.1 - Approved make	IEC 61439 panels bidder must
	list indicates IEC 61439.	submit OEM's letter &
	Techincal specification	authorised franchisee certificate
	shows IS 8623.	with all 13 type test certificates
	Panel to be considered	from OEM only.
	IEC61439 or IS 8623 ?	
	Please confirm.	
24	TECHINCAL BID	As per latest PWD CSR/DSR
	Form-VI	rate for CSR/DSR items and
	Point no. 3 - These works	non DSR/CSR items as per rate
	other than tender BOQ will	analysis with the market rates.
	be carried out at mutually	mining one manner rates.
	agreed rates.	
25	TECHINCAL BID	As per tender term &
25		conditions.
	Form-VI	conditions.
	Point no.7 - Generally	
	applicable for civil work &	
	not applicable in this case.	
	Please clarify.	

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26	Miscellaneous points- Type tests certificates will be provided for items wherever required as per tender. Routine tests can be provided on required equipments.	All type tests certificates should be submitted with the Tender Technical Bid on CPPP portal.
27	Miscellaneous points - Water, Construction Power shall be provided by client free of cost. Please confirm.	The bidder should arrange water & electrical power supply at his own cost.

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Annexure-II

Tender for "Internal and External Electrical work of New IUCAA-2 Building at IUCAA.Pune."

100	CAA,Pune."			
		nce in connection with the above-me		
	Tender Reference	e No. M23-0937, Tender ID 2024_IU	CAA_800339_1	T 22 22 222
				27.03.2024
Sr. No.	Name of the Agency	Name of Representative	Mobile No.	Sign
1	Destiny Environ Solution PH Hd-HOLYAN	Anit Singh	9741801872	Erm
2	Royal Power Turnkey Imple	neuts Ramakar Katkee	73049727 <i>0</i> 0	Rehuber
3	OMTECH ELECTRICAL SOLUTION PUT.	SHANTANY KUMAR	9717476137	Ş
4	suvarna Blect.	Bhosales.a.	9881057224	Janua
		Kolpesh R. lohow	7083564376	Box.
5	CONCEPT ENGG. PROJ. PVT. LTD.	ABHISH MADHUKUMAR KETKI SHAH	985829524	Sub.
	,c			
B	SYMERGY SKI INFRADEVEL	OPMENT BALASAMER KALDATE ASHISH WAYHMARE	9607660430	at.

PRE-BID MEETING FOR "INTERNAL AND EXTERNAL ELECTRICAL WORK OF NEW IUCAA-2 BUILDING AT IUCAA, PUNE."

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- 1. Architect Rajeev Vishwasrao
- 2. Mr. Vikas Sanghavi-Electrical Consultant
- 3. Mr. Nitin Ohol
- 4. Mr. Hitesh Deshmukh
- 5. Mr.G.B. Gaikwad
- 6. Mr. M.S. Sahastrabudhe-Could not attend the meeting due to prior commitments.

A total of nine representatives from six parties have attended the meeting. The questions raised by the agencies were satisfactorily clarified by IUCAA. The queries with responses are enclosed in Annexure – I and the list of representatives is present in Annexure – II.

Hitesh Deshmukh

G.B. Gaikwad

Nitin Ohol

Vikas Sanghavi

Ar.Rajeev Vishwasrao

c.en		PANEL MATERIAL DETAILS 1/2	=======================================	
1		11 KV LBS	8	8
2		11 KV VCB +ENCL	1	1
3		USS +RTCC+OLTC	1	1
		11 KV TVM +MK	2	2
4	ACO, 02	I/C		1
		ACB,2000A,4P,LSIG	2	2
		SPD -1	1	1
		MCB SP 2A,	3	3
		Vm +Vss	1	1
		IND.LAMP SET RYB	1	1
		BUS BAR	12 M	12 N
		2000A, ALU,TPN set	1	1
		O/G		
		CT 2000/5,SET	2	2
		DTM 2000A/5	1	1
		IND.LAMP SET	1	1
5	PCC,04	I/C		
		ACB,1600A,4P,LSIG	1	1
		SPD 480V	1	1
		Vm +Vss	1	1
		CT 1600/5	1	1
		IND.LAMP SET	1	1
		LM	1	1
		MCB SP 2A	3	3
		BUS BAR	11 M	11 N
	1	2000A,ALU,TPN,SET	1	1
	1	0/G	+ +	-
	+		1	1
	+	MCCB,800A,FP,50kA	1	1
		MCCB,400A,FP,36kA	2	2
		MCCB,315A,FP,36kA	3	3
		MCCB,250A,FP,36kA	5	5
		MCCB,160A,FP,36kA	2	2
		MCCB,100A,FP,16kA	3	3
	-	LM WITH CT SET	16	16
		B/C 800A,FP,ACB,LSIg	1	1
6	HVAC,05	I/C		
		MCCB,800A,FP,50kA	1	1
		Vm +Vss	1	1
		IND.LAMP SET	1	1
		MCB SP 2A	3	3
		BUS BAR	9 M	9 M
		1000A,ALU,TPN,SET	1	1
		O/G		
		MCCB,63A,FP,16kA	2	2
		MCCB,125A,FP,16kA	12	12
7	PDB2 (12)	I/C		
	12W VTPN	MCCB,250A,FP,36kA	1	1
		O/G		
		ISOLATOR,100A,TP,10kA	3	3
		MCB,63A,TP,10kA	9	9
8	PDB,06	I/C		
	12W VTPN	MCCB,250A,FP,36kA	1	1
		O/G		
		MCB,63A,TP,10kA	6	6
		MCB,40A,TP,10kA	6	6
7/1	EQDB2	I/C		
	4W VTPN	MCCB,100A,FP,16kA	1	1
		O/G	1	-
		MCB,63A,TP,10kA	4	4
9	EQ DB,07	I/C		100.5
	12WVTPN	MCCB,160A,FP,16kA	1	1

20.1	W/S PP,9/7/1	I/C		Т
20.1			1	1
	4W ETPN	MCB,FP,16A,10K	1	1
	1	0/G	12	4
20.2	W/C DD 0/7/2 F	MCB,SP,10A,10k	12	1.
20.2		I/C		-
	12W ETPNx4 nos.	MCB,32A,FP,10kA	1	4
		0/G		1000
		MCB,SP,10A,10k	36	14
21	HUB SWITCH DB,9/8	I/C		
	4W VTPN	MCCB,100A,FP,16kA	1	1
		0/G		
		MCB,40A,TP,10kA	3	3
		MCB,16A,SP,10kA	1	1
		MCB BLANK PLATE	2	2
21.1	HUB1(4W SPN),9/8/1	RCCB,DP,16A,10kA	1	1
21.2	HUB 9/8/2,4	I/C		
	12W SPN DBx2	RCCB,40A,FP,30mA	1	2
		O/G		
		MCB,16A,SP,10kA	4	8
21.3	HUB 9/8/3	I/C		-
	4W VTPN	RCCB,40A,FP,30mA	1	1
	111/11/11/11	O/G	+-	_
		MCB,16A,SP,10kA	5	5
		MCB BLANK PLATE	7	
22	EMITO DR 0/10		- /	
22	EM.LTG.DB ,9/10	I/C		_
	8W VTPN	MCB FP, 25A ,10 KA	1	1
		O/G	\perp	
	514450 DD 0404-	MCB TP 6A,10kA	6	6
22.1	EM.LTG.DB 9/10/1-5	I/C		
	12W SPN x 5NOS.	MCB FP, 6A ,10kA	1	5
_		0/G	+	
		MCB SP,6A,10kA	6	30
23	WIFI DB, 9/9	I/C	+	
	12W SPN DB	MCB, FP, 40A ,10kA	1	1
		O/G		
		MCB SP,16A	6	6
23.1	WIFI DB 9/9/1-4)	I/C		
	8W SPN DBx4 NOS.	MCB DP 16A ,10kA	1	4
		O/G		
		MCB SP,10A,10kA	6	24
12.1	PDB12/1to 3	I/C		
	4WVTPNx3nos.	MCB,63A,FP,10kA	1	3
		O/G		
		MCB,40A,TP,10kA	4	12
12.2	PDB12/1/1,2	I/C		
	PDB12/2/1,2,3	MCB,40A,FP,10kA	1	8
	PDB12/3/1,2,3	O/G		
	4WETPNX8 nos	MCB,16A,SP,10kA	12	96
12.3	PDB12/5/1,2,3	I/C		
	PDB12/9/1,2,3,4	MCB,32A,FP,10kA	1	7
-	8WSPNX7 nos	0/G	1-1	
	The second secon	MCB,20A,TP,10kA	4	28
		20A,TPN,MCB+P&S+ENCL	12	12
12.4	PDB12/6to8	Total W	12	12
.2.4		I/C	+ +	4.4
	4WETPNX11 nos	MCB,40A,FP,10kA	1	11
		0/G	45	10
		MCB,16A,SP,10kA	12	132
-		20A,TPN,MCB+P&S+ENCL	9	9

		0/G	13	12
		MCB,63A,TP,10kA	12	12
_	LDB,08	1/C	1	1
_	12WVTPN	MCCB,100A,FP,16kA	1	1
		O/G	11	11
		MCB,32A,TP,10kA	1	1
		MCB,16A,SP,10kA	2	2
		MCB BLANK PLATE		1
	UPS1 I/P	MCCB,250A,FP,36kA,encl.	1	1
	UPS1 O/P	MCCB,250A,FP,36kA,encl.	1	1
9	UPSDB,4/12	I/C		1
	12WVTPN	MCCB,250A,FP,36kA	1	1
		SPD	1	1
		`O/G	2	1
		ISOLATOR,100A,TP,10kA	3	3
		MCB,63A,TP,10kA	4	4
		MCB,32A,TP,10kA	2	2
		MCB,25A,TP,10kA	1	1
		MCB,16A,SP,10kA	3	3
		MCB BLANK PLATE	6	6
14	UPS2 I/P	MCCB,250A,FP,36kA,encl.	1	1
15	UPS2 O/P	MCCB,250A,FP,36kA,encl.	1	1
	SERVER RACK DB			
4/10	4/10	I/C		
	6WVTPN	MCCB,250A,FP,36kA	1	1
		SPD	1	1
		`O/G		
		MCB,32A,TP,10kA	6	6
17	APFC PANEL	150 Kvar, set	2	2
18	LIFT PANEL,9/1	I/C		
	12W SPN	MCB,32A,FP,10kA	1	1
		O/G		
		MCB,32A,FP,10kA	1	1
		MCB,16A,DP,10kA	2	2
18.1	8WSPN	RCCB,32A,FP,30mA+ENCL.	1	1
18.2	4WSPN	RCCB,16A,DP,30mA+ENCL.	1	1
18.3	4WSPN	RCCB,16A,DP,30mA+ENCL.	1	1
19	EXT.LTG.DB,9/2	MCB,25A,FP,10kA	1	1
	8WSPN	LTG.TIMER PANEL	1	1
		O/G	0	0
		MCB,SP,16A,10k	4	4
20	W/S PP DB,9/7	I/C		
	8W VTPN	MCB FP,63A,10kA	1	1
		O/G		
		MCB,16A,TP,10kA	1	1
		MCB,32A,TP,10kA	5	5
		MCB BLANK PLATE	6	6
37	PDB3/1	I/C		
	4WVTPN	MCB,63A,FP,10kA	1	1
		O/G		
		MCB,32A,TP,10kA	3	3
		MCB BLANK PLATE	3	3
37.1	PDB3/1/1,2	I/C		
	4WVTPNx2	MCB,32A,FP,10kA	1	2
		O/G		
		MCB,32A,TP,10kA	7	14
		MCB BLANK PLATE	5	10
9.1	EQDB1&2	I/C		
	12WSPNx12	RCCB,63A,FP,30mA	1	12
		O/G		
		MCB,32A,TP,10kA	1	12
		MCB,32A,SP,10kA	1	12

			1	3707
	12W VTPN	MCCB,100A,FP,16kA	1	1
		O/G	42	12
		MCB,20A,TP,10kA	12	12
	PDB12/5	I/C	1	1
	12W VTPN	MCCB,100A,FP,16kA	1	
		O/G	10	10
		MCB,20/32A,TP,10kA	2	2
		MCB,63A,TP,10kA		
	PDB12/6	I/C	1	1
	12W VTPN	MCB,63A,FP,10kA	1	
		0/G	6	6
		MCB,20A,TP,10kA	6	6
acoverie de		MCB,40A,TP,10kA	ь	0
12.8	PDB12/7	I/C	1	1
	8W VTPN	MCB,63A,FP,10kA	1	_1
		0/G	5	5
		MCB,40A,TP,10kA	3	3
	S. Constitution of the	MCB,20A,TP,10kA	3	3
12.9	PDB12/8	I/C	1	1
	8W VTPN	MCB,63A,FP,10kA	++	1
		O/G		6
		MCB,40A,TP,10kA	6	0
			2	2
		MCB,20A,TP,10kA	-	-
12.9	PDB12/9	I/C	1	1
	8W VTPN	MCB,63A,FP,10kA	1	1
		O/G	-	1
		MCB,32A,TP,10kA	4	4
		MCB,20A,TP,10kA	4	4
31	ST LTG.BOX 15 nos.	I/C	1	15
- 2.2		MCB,6A,DP,10kA+ENCL	1	1
32	DG PCC 3/1	ACB,2000A,FP,50kA	3	3
		BUSBAR,	1	1
	0.15	2500A,ALU.TPN, SET ACB,2000A,FP,16kA	1	1
	O/G	MCCB,160A,FP,16kA	1	1
	SE C/O DANIEL		1	1
33	FF C/O PANEL	ATS,160A,FP,	+-	+ -
34.1	PDB06/1/1,2,4,9,10,	I/C	1	5
	12W SPNx5NOS.	MCB FP,40A,	-	+ -
		O/G MCB,32A,TP,10kA	6	30
		MCB BLANK PLATE	6	30
34.2	PDB4/1/3,5,6,7,8,	I/C		-
34.2	12W SPNx5NOS.	MCB FP,32A,	1	5
	1244 311431403.	O/G		
		MCB,32A,TP,10kA	6	30
_		MCB BLANK PLATE	6	30
1	UPS2DB 4/15	I/C		
	8WVTPN	MCCB 250A, FP,,16KA	1	1
	OWVIII	O/G		\top
		100A ISO.TP,10kA	8	8
2	UPS2DB4/15/1TO 5	I/C		
	4WVTPNx5NOS.	MCCB 100A, FP,,16KA	1	5
		O/G		1
		MCB,63A,TP,10kA	1	20
3	UPS2DB4/15/1/1TO 3	I/C		1
3	4WVTPNx3NOS.	MCB,63A,FP,10kA	1	3
	TVV VII IVAJIVOJ.	O/G		+
	1	MCB,20A,TP,10kA	1	3
		MCB,16A,SP,10kA	6	18
4	UPS2DB4/15/2/1TO 3	I/C		T

10.1	LDB8/2,3,4,5	I/C		
- 5	12WVTPNx4	RCCB,32A,FP,30mA	1	4
		O/G		
		MCB,10A,SP,10kA	36	144
10.2	LDB8/1,6,7	I/C		
	8WVTPNx3	RCCB,32A,FP,30mA	1	3
		O/G		4
		MCB,10A,SP,10kA	24	72
10.3	LDB8/8,9	I/C		
	4WVTPNx2	RCCB,32A,FP,30mA	1	2
		O/G		
		MCB,10A,SP,10kA	12	24

		O/G		
		MCB,20A,TP,10kA	1	3
		MCB,16A,SP,10kA	6	18
5	UPS2DB4/15/3/1TO 3	I/C		
	4WVTPNx3NOS.	MCB,63A,FP,10kA	1	3
		O/G		
		MCB,20A,TP,10kA	1	3
		MCB,16A,SP,10kA	6	18
6	UPS2DB4/15/4/1TO 3	I/C		
	4WVTPNx3NOS.	MCB,63A,FP,10kA	1	3
		O/G		
		MCB,20A,TP,10kA	1	3
		MCB,16A,SP,10kA	6	18
7	UPS2DB4/15/4/1TO 3	I/C		
	4WVTPNx3NOS.	MCB,63A,FP,10kA	1	3
		O/G		
		MCB,20A,TP,10kA	1	3
		MCB,16A,SP,10kA	6	18