| Инв. N подл. | Подп. и дата | Взам. инв. N |
|---|---|---|
| R4.05269.4.0.32 | | |

# Ряды зажимов шкафа N 113 питания оперативным током

## Левая боковина

**04 Реле-повторители положения разъединителей линии WE03 04** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 04x1 | SF4:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 04x4 | SF4:2 |
| | | 5 | | |

**05 Реле-повторители положения разъединителей линии WE04 05** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 05x1 | SF5:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 05x4 | SF5:2 |
| | | 5 | | |

**06 Питание реле контроля давления элегаза TT линии WE03 06** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| 301-WE03 | | 1 | 06x1 | SF6:4 |
| | | 2 | | |
| | | 3 | | |
| 302-WE03 | | 4 | 06x4 | SF6:2 |
| | | 5 | | |

**10 Основная защита ВЛ 220 кВ WE03 10** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 10x1 | SF10:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 10x4 | SF10:2 |
| | | 5 | | |

**11 Основная защита ВЛ 220 кВ WE04 11** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 11x1 | SF11:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 11x4 | SF11:2 |
| | | 5 | | |

**12 Сириус-2-ОМП ВЛ 220 кВ WE03 12** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 12x1 | SF12:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 12x4 | SF12:2 |
| | | 5 | | |

**16 Резерв 16** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 16x1 | SF16:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 16x4 | SF16:2 |
| | | 5 | | |

**17 1 питание МКПА ВЛ 220 кВ WE01 17** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 17x1 | SF17:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 17x4 | SF17:2 |
| | | 5 | | |

**18 1 питание МКПА ВЛ 220 кВ WE02 18** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 18x1 | SF18:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 18x4 | SF18:2 |
| | | 5 | | |

**22 1 питание СР-24 ВЛ 220 кВ WE04 22** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 22x1 | SF22:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 22x4 | SF22:2 |
| | | 5 | | |

**23 Резерв 23** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 23x1 | SF23:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 23x4 | SF23:2 |
| | | 5 | | |

**24 Резерв 24** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| | | 1 | 24x1 | SF24:4 |
| | | 2 | | |
| | | 3 | | |
| | | 4 | 24x4 | SF24:2 |
| | | 5 | | |

**00 Общепанельная аппаратура 00** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| +EH-HC01F001 | | 1 | 00x1 | SF1-OF:11 |
| | | 2 | 00x2 | SF1-SD:91 |
| | | 3 | | |
| 927 | | 4 | 00x4 | HLW |
| SF1-OF:12 | 00x5' | 5 | 00x5 | SF2-OF:12 |
| SF3-OF:12 | 00x6' | 6 | 00x6 | SF4-OF:12 |
| SF5-OF:12 | 00x7' | 7 | 00x7 | SF6-OF:12 |
| SF7-OF:12 | 00x8' | 8 | 00x8 | SF8-OF:12 |
| SF9-OF:12 | 00x9' | 9 | 00x9 | SF10-OF:12 |
| SF11-OF:12 | 00x10' | 10 | 00x10 | SF12-OF:12 |
| SF13-OF:12 | 00x11' | 11 | 00x11 | SF14-OF:12 |
| SF15-OF:12 | 00x12' | 12 | 00x12 | SF16-OF:12 |
| SF17-OF:12 | 00x13' | 13 | 00x13 | SF18-OF:12 |
| SF19-OF:12 | 00x14' | 14 | 00x14 | SF20-OF:12 |
| SF21-OF:12 | 00x15' | 15 | 00x15 | SF22-OF:12 |
| SF23-OF:12 | 00x16' | 16 | 00x16 | SF24-OF:12 |
| | | 17 | | |
| HC01E967 | | 18 | 00x18 | SF1-SD:94 |
| HC01E967 | | 19 | 00x19 | SF2-SD:94 |
| SF3-SD:94 | 00x20' | 20 | 00x20 | SF4-SD:94 |
| SF5-SD:94 | 00x21' | 21 | 00x21 | SF6-SD:94 |
| SF7-SD:94 | 00x22' | 22 | 00x22 | SF8-SD:94 |
| SF9-SD:94 | 00x23' | 23 | 00x23 | SF10-SD:94 |
| SF11-SD:94 | 00x24' | 24 | 00x24 | SF12-SD:94 |
| SF13-SD:94 | 00x25' | 25 | 00x25 | SF14-SD:94 |
| SF15-SD:94 | 00x26' | 26 | 00x26 | SF16-SD:94 |
| SF17-SD:94 | 00x27' | 27 | 00x27 | SF18-SD:94 |
| SF19-SD:94 | 00x28' | 28 | 00x28 | SF20-SD:94 |
| SF21-SD:94 | 00x29' | 29 | 00x29 | SF22-SD:94 |
| SF23-SD:94 | 00x30' | 30 | 00x30 | SF24-SD:94 |
| | | 31 | | |
| -EH-HC01F001 | | 32 | 00x32 | HLW |
| | | 33 | | |
| | | 34 | | |
| | | 35 | | |
| | | 36 | | |
| | | 37 | | |
| | | 38 | | |
| | | 39 | | |
| | | 40 | | |
| 779 | | 41 | 00x41 | KL1:15 |
| | | 42 | | |
| 742 | | 43 | 00x43 | KL1:16 |
| | | 44 | | |
| +EB | | 45 | 00x45 | KL2:1 |
| | | 46 | 00x46 | KL2:2 |
| | | 47 | 00x47 | KL2:5 |
| | | 48 | | |
| ⊕ EB | | 49 | 00x49 | KL2:3 |
| | | 50 | 00x50 | KL2:4 |
| | | 51 | 00x51 | KL2:7 |
| | | 52 | | |
| | | 53 | | |
| | | 54 | | |
| | | 55 | | |
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| | | 81 | | |
| | | 82 | | |
| | | 83 | | |
| | | 84 | | |
| | | 85 | | |

**00 Цепи ~220 В 00** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| B | | 86 | 00x86 | SF1/1 |
| | | 87 | | |
| | | 88 | | |
| N | | 89 | 00x89 | SF1/3 |
| | | 90 | | |

Концевой стопор E/UK с держателем табличек KLM-A

Концевой стопор E/UK

Торцевая крышка D-UT 2,5/10

## Правая боковина

**01 Резерв 01** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF1:4 | 01x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF1:2 | 01x4 | 4 | | |
| | | 5 | | |

**02 Резерв 02** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF2:4 | 02x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF2:2 | 02x4 | 4 | | |
| | | 5 | | |

**03 Резерв 03** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF3:4 | 03x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF3:2 | 03x4 | 4 | | |
| | | 5 | | |

**07 Питание ПРД АКА "КЕДР" ВЛ 220 кВ WE03 07** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF7:4 | 07x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF7:2 | 07x4 | 4 | | |
| | | 5 | | |

**08 Питание ПРМ АКА "КЕДР" ВЛ 220 кВ WE03 08** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF8:4 | 08x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF8:2 | 08x4 | 4 | | |
| | | 5 | | |

**09 Резерв 09** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF9:4 | 09x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF9:2 | 09x4 | 4 | | |
| | | 5 | | |

**13 АУРА ВЛ 220 кВ WE03 13** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF13:4 | 13x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF13:2 | 13x4 | 4 | | |
| | | 5 | | |

**14 Резерв 14** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF14:4 | 14x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF14:2 | 14x4 | 4 | | |
| | | 5 | | |

**15 Резерв 15** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF15:4 | 15x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF15:2 | 15x4 | 4 | | |
| | | 5 | | |

**19 1 питание МКПА ВЛ 220 кВ WE03 19** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF19:4 | 19x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF19:2 | 19x4 | 4 | | |
| | | 5 | | |

**20 1 питание МКПА ВЛ 220 кВ WE04 20** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF20:4 | 20x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF20:2 | 20x4 | 4 | | |
| | | 5 | | |

**21 2 питание СР-24 ВЛ 220 кВ WE03 21** (клеммы UT6)

| | | | | |
|---|---|---|---|---|
| SF21:4 | 21x1 | 1 | | |
| | | 2 | | |
| | | 3 | | |
| SF21:2 | 21x4 | 4 | | |
| | | 5 | | |

**00 -EC1 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| X0x14 | 00x91 | 91 | 00x91' | -EC1 |
| -EC1 | | 92 | | -EC1 |
| SAC1:8 | 00x93 | 93 | 00x93' | SAC2:8 |
| SAC3:8 | 00x94 | 94 | 00x94' | SAC4:8 |
| SAC5:8 | 00x95 | 95 | 00x95' | SAC6:8 |
| SAC7:8 | 00x96 | 96 | 00x96' | SAC8:8 |
| SAC9:8 | 00x97 | 97 | 00x97' | SAC10:8 |
| SAC11:8 | 00x98 | 98 | 00x98' | SAC12:8 |
| SAC13:8 | 00x99 | 99 | 00x99' | SAC14:8 |
| SAC15:8 | 00x100 | 100 | 00x100' | SAC16:8 |
| SAC17:8 | 00x101 | 101 | 00x101' | SAC18:8 |
| SAC19:8 | 00x102 | 102 | 00x102' | SAC20:8 |
| SAC21:8 | 00x103 | 103 | 00x103' | SAC22:8 |
| SAC23:8 | 00x104 | 104 | 00x104' | SAC24:8 |

**00 -EC2 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| X0x1 | 00x105 | 105 | 00x105' | -EC2 |
| -EC2 | | 106 | | -EC2 |
| SAC1:5 | 00x107 | 107 | 00x107' | SAC2:5 |
| SAC3:5 | 00x108 | 108 | 00x108' | SAC4:5 |
| SAC5:5 | 00x109 | 109 | 00x109' | SAC6:5 |
| SAC7:5 | 00x110 | 110 | 00x110' | SAC8:5 |
| SAC9:5 | 00x111 | 111 | 00x111' | SAC10:5 |
| SAC11:5 | 00x112 | 112 | 00x112' | SAC12:5 |
| SAC13:5 | 00x113 | 113 | 00x113' | SAC14:5 |
| SAC15:5 | 00x114 | 114 | 00x114' | SAC16:5 |
| SAC17:5 | 00x115 | 115 | 00x115' | SAC18:5 |
| SAC19:5 | 00x116 | 116 | 00x116' | SAC20:5 |
| SAC21:5 | 00x117 | 117 | 00x117' | SAC22:5 |
| SAC23:5 | 00x118 | 118 | 00x118' | SAC24:5 |

**00 +EC1 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| X0x18 | 00x119 | 119 | 00x119' | +EC1 |
| KL1/4 | 00x120 | 120 | | +EC1 |
| SAC1:4 | 00x121 | 121 | 00x121' | SAC2:4 |
| SAC3:4 | 00x122 | 122 | 00x122' | SAC4:4 |
| SAC5:4 | 00x123 | 123 | 00x123' | SAC6:4 |
| SAC7:4 | 00x124 | 124 | 00x124' | SAC8:4 |
| SAC9:4 | 00x125 | 125 | 00x125' | SAC10:4 |
| SAC11:4 | 00x126 | 126 | 00x126' | SAC12:4 |
| SAC13:4 | 00x127 | 127 | 00x127' | SAC14:4 |
| SAC15:4 | 00x128 | 128 | 00x128' | SAC16:4 |
| SAC17:4 | 00x129 | 129 | 00x129' | SAC18:4 |
| SAC19:4 | 00x130 | 130 | 00x130' | SAC20:4 |
| SAC21:4 | 00x131 | 131 | 00x131' | SAC22:4 |
| SAC23:4 | 00x132 | 132 | 00x132' | SAC24:4 |

**00 +EC2 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| X0x7 | 00x133 | 133 | 00x133' | +EC2 |
| KL1/6 | 00x134 | 134 | | +EC2 |
| SAC1:1 | 00x135 | 135 | 00x135' | SAC2:1 |
| SAC3:1 | 00x136 | 136 | 00x136' | SAC4:1 |
| SAC5:1 | 00x137 | 137 | 00x137' | SAC6:1 |
| SAC7:1 | 00x138 | 138 | 00x138' | SAC8:1 |
| SAC9:1 | 00x139 | 139 | 00x139' | SAC10:1 |
| SAC11:1 | 00x140 | 140 | 00x140' | SAC12:1 |
| SAC13:1 | 00x141 | 141 | 00x141' | SAC14:1 |
| SAC15:1 | 00x142 | 142 | 00x142' | SAC16:1 |
| SAC17:1 | 00x143 | 143 | 00x143' | SAC18:1 |
| SAC19:1 | 00x144 | 144 | 00x144' | SAC20:1 |
| SAC21:1 | 00x145 | 145 | 00x145' | SAC22:1 |
| SAC23:1 | 00x146 | 146 | 00x146' | SAC24:1 |

**00 (+)EP1 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| (+)EP1 | | 157 | 00x157' | (+)EP1 |
| (+)EP1 | | 158 | | (+)EP1 |
| (+)EP1 | | 159 | | (+)EP1 |
| (+)EP1 | | 160 | | (+)EP1 |
| (+)EP1 | | 161 | | (+)EP1 |

**00 (+)EP2 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| X0x13 | 00x162 | 162 | 00x162' | (+)EP2 |
| (+)EP2 | | 163 | | (+)EP2 |
| (+)EP2 | | 164 | | (+)EP2 |
| (+)EP2 | | 165 | | (+)EP2 |
| (+)EP2 | | 166 | | (+)EP2 |

**00 ⊕ EC1 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| KL1/1 | 00x167 | 167 | 00x167' | ⊕ EC1 |
| ⊕ EC1 | | 168 | | ⊕ EC1 |
| ⊕ EC1 | | 169 | | ⊕ EC1 |
| ⊕ EC1 | | 170 | | ⊕ EC1 |
| ⊕ EC1 | | 171 | | ⊕ EC1 |

**00 ⊕ EC2 00** (клеммы UT10)

| | | | | |
|---|---|---|---|---|
| KL1/5 | 00x172 | 172 | 00x172' | ⊕ EC2 |
| ⊕ EC2 | | 173 | | ⊕ EC2 |
| ⊕ EC2 | | 174 | | ⊕ EC2 |
| ⊕ EC2 | | 175 | | ⊕ EC2 |
| ⊕ EC2 | | 176 | | ⊕ EC2 |

Концевой стопор E/UK с держателем табличек KLM-A

Торцевая крышка D-UT 2,5/10

Концевой стопор E/UK

Концевой стопор E/UK с держателем табличек KLM-A

Перемычки выполнить проводом ПВ-3 10 мм²

X0 — Клеммник с фасадной стороны шкафа

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 00x91 | -EC1 | -EC1 | -EC1 | 00x119 | +EC1 | +EC1 | +EC1 |
| X0x14 | X0x15 | X0x16 | X0x17 | X0x18 | X0x19 | X0x20 | X0x21 |
| -EC1 | -EC1 | -EC1 | -EC1 | +EC1 | +EC1 | +EC1 | +EC1 |

Концевой стопор UHV-E

X0 — Клеммник с монтажной стороны шкафа

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00x105 | -EC2 | -EC2 | -EC2 | -EC2 | -EC2 | 00x133 | +EC2 | +EC2 | +EC2 | +EC2 | +EC2 | 00x162 |
| X0x1 | X0x2 | X0x3 | X0x4 | X0x5 | X0x6 | X0x7 | X0x8 | X0x9 | X0x10 | X0x11 | X0x12 | X0x13 |
| -EC2 | -EC2 | -EC2 | -EC2 | -EC2 | -EC2 | +EC2 | +EC2 | +EC2 | +EC2 | +EC2 | +EC2 | (+)EP2 |

Силовые клеммы UHV 95-AS/AS

Концевой стопор UHV-E

Разделитель клеммных групп UHV-TP2

1 Для жил со стороны внутренней коммутации шкафа указать местную и обратную маркировку.

| Изм. | Кол.уч. | Лист | N док. | Подп. | Дата |
|---|---|---|---|---|---|
| Разраб.инж. Iк. | | Протасов | | | 15.06 |
| Пров.нач.гр. | | Зайцев | | | 15.06 |
| Н.контр. | | Бороздина | | | 15.06 |

Инв. N подл. R4.05269.4.0.32

R4.AE00.3960.032.01.00.001

РОСТОВСКАЯ АЭС БЛОК 4
ОУТ. Сооружение заходов ВЛ 220 кВ "Волгодонск–Котельниково"
Техническое задание заводу на изготовление шкафов РЗА в РЩ ОРУ-220 кВ

ББС-2. Шкаф N113 питания оперативным током
Схема электрическая соединений рядов зажимов

| Лит. | Масса | Масштаб |
|---|---|---|
| | | |

Лист 55 | Листов

АО "НИАЭП" 2015

Формат А4х6