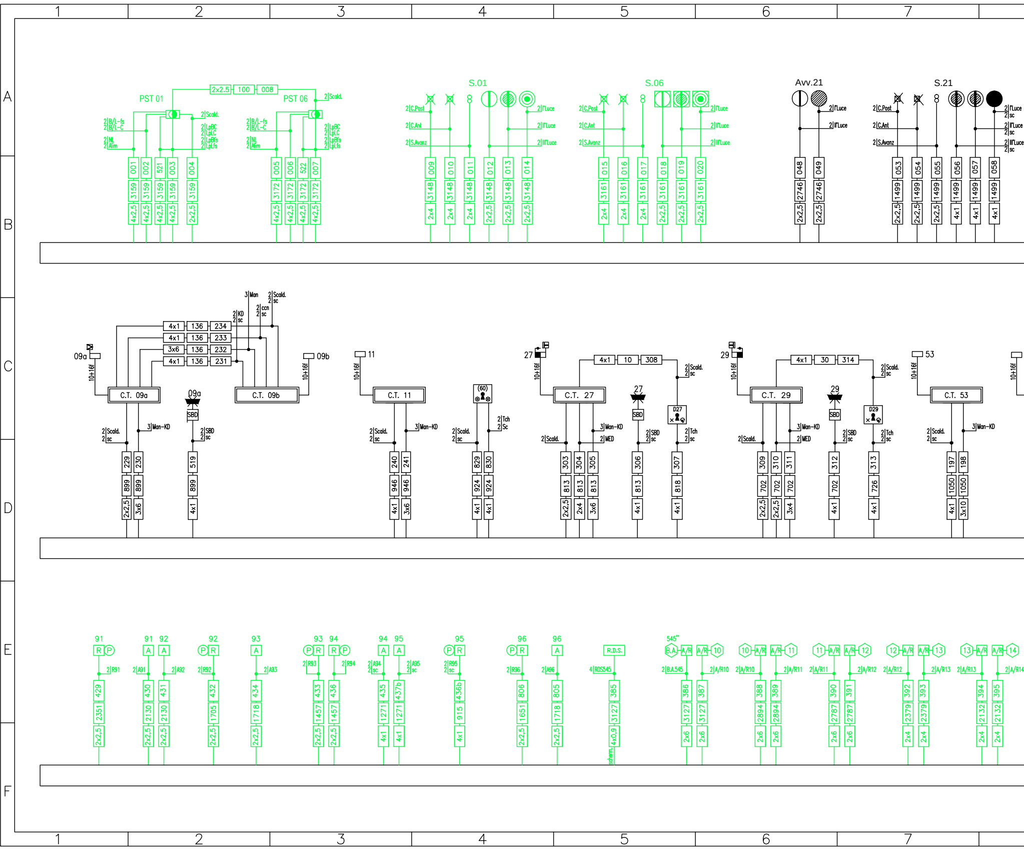
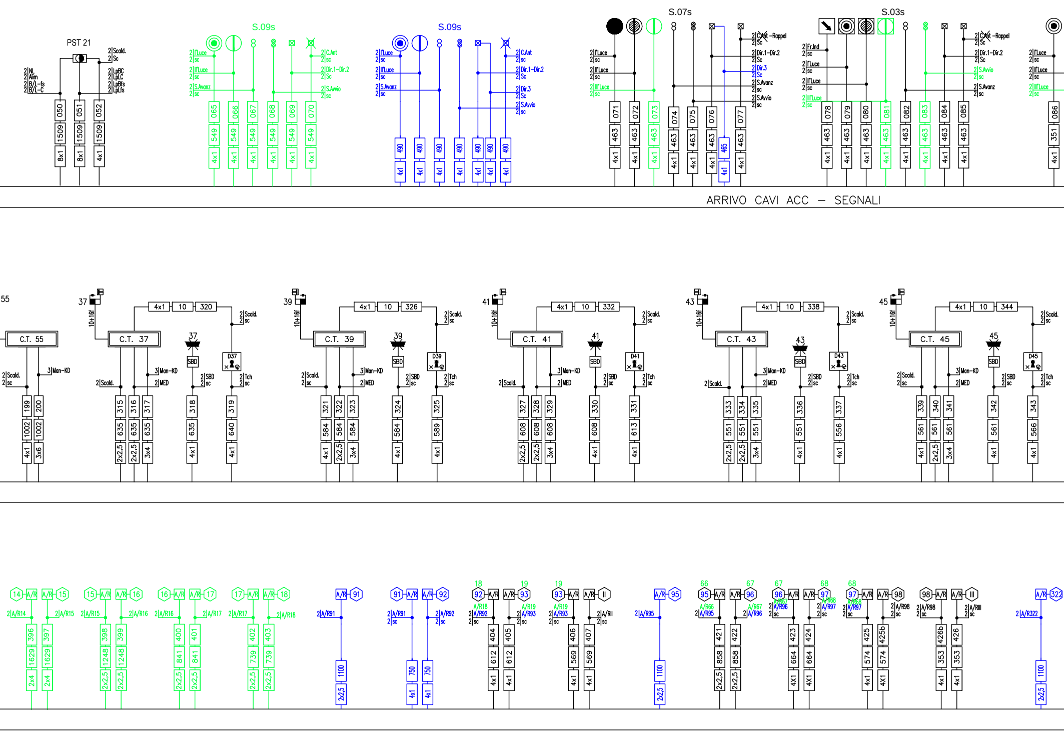
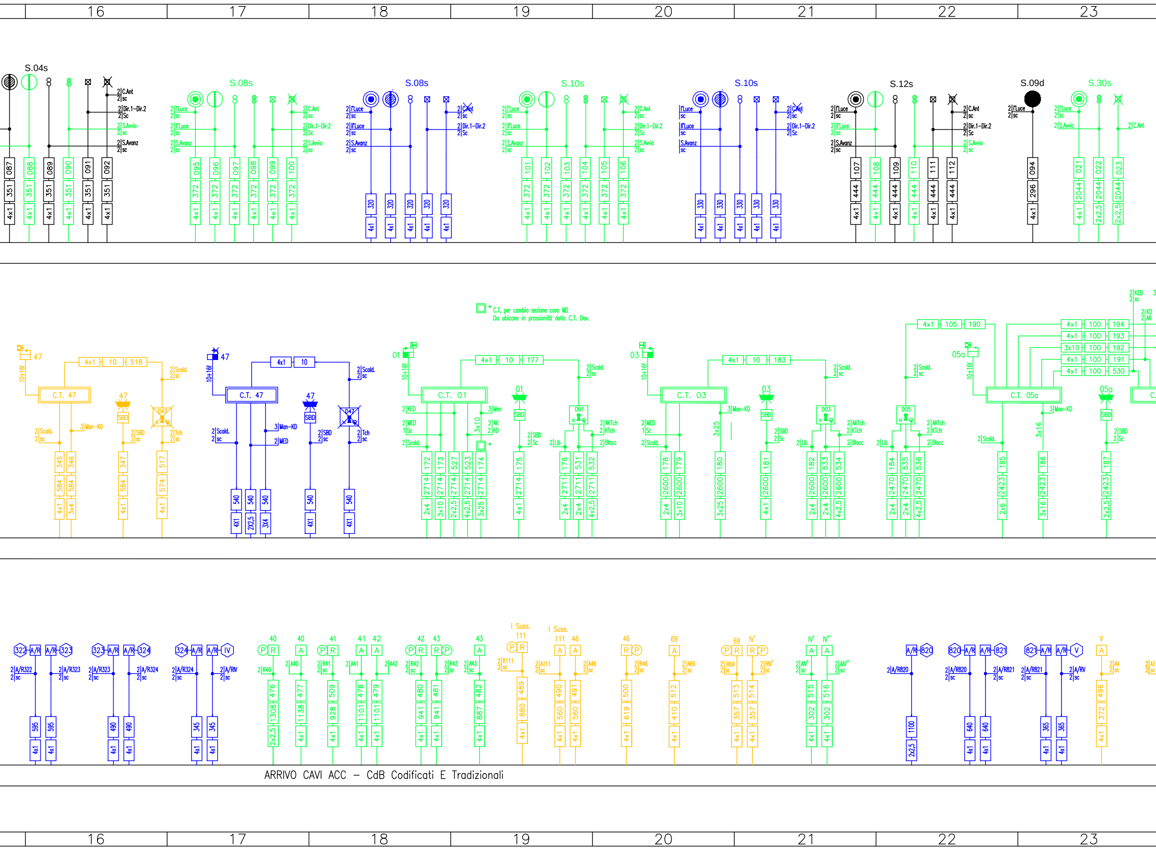

1
2
3
4
5
6
7
A
B
C
D
E
F
PST 01
PST 06
2x2.5
100
008
2|Scald.
2|B/L-fs
2|B/L-C
2|NL
2|Alim
2|LpBC
2|LpLC
2|LpBfs
2|LpLfs
001
002
521
003
004
005
006
522
007
3159
3172
4x2,5
2x2,5
S.01
S.06
Avv.21
S.21
2|C.Post
2|C.Ant
2|S.Avanz
2|I°Luce
2|II°Luce
2|III°Luce
2|sc
009
010
011
012
013
014
015
016
017
018
019
020
048
049
053
054
055
056
057
058
3148
3161
2746
1499
2x4
4x1
09a
09b
11
27
29
53
10+16f
C.T. 09a
C.T. 09b
C.T. 11
C.T. 27
C.T. 29
C.T. 53
4x1
3x6
136
234
233
232
231
3|Man
2|Scald.
2|KD
2|ccn
2|sc
4x1
10
308
30
314
(60)
SBD
D27
D29
2|Scald.
3|Man-KD
2|MED
2|SBD
2|Tch
2|Sc
229
230
519
240
241
829
830
303
304
305
306
307
309
310
311
312
313
197
198
899
946
924
813
818
702
726
1050
2x2,5
3x6
3x4
3x10
91
92
93
94
95
96
R
P
A
R.D.S.
545"
B.A.
A/R
10
11
12
13
14
2|R91
2|A91
2|A92
2|R92
2|A93
2|R93
2|R94
2|A94
2|A95
2|R95
2|R96
2|A96
4|RDS545
2|B.A.545
2|A/R10
2|A/R11
2|A/R12
2|A/R13
2|A/R14
429
430
431
432
434
433
436
435
437b
436b
806
805
385
386
387
388
389
390
391
392
393
394
395
2351
2130
1705
1718
1457
1271
915
1651
3127
2894
2787
2379
2132
2x6
4x0,9
scherm.

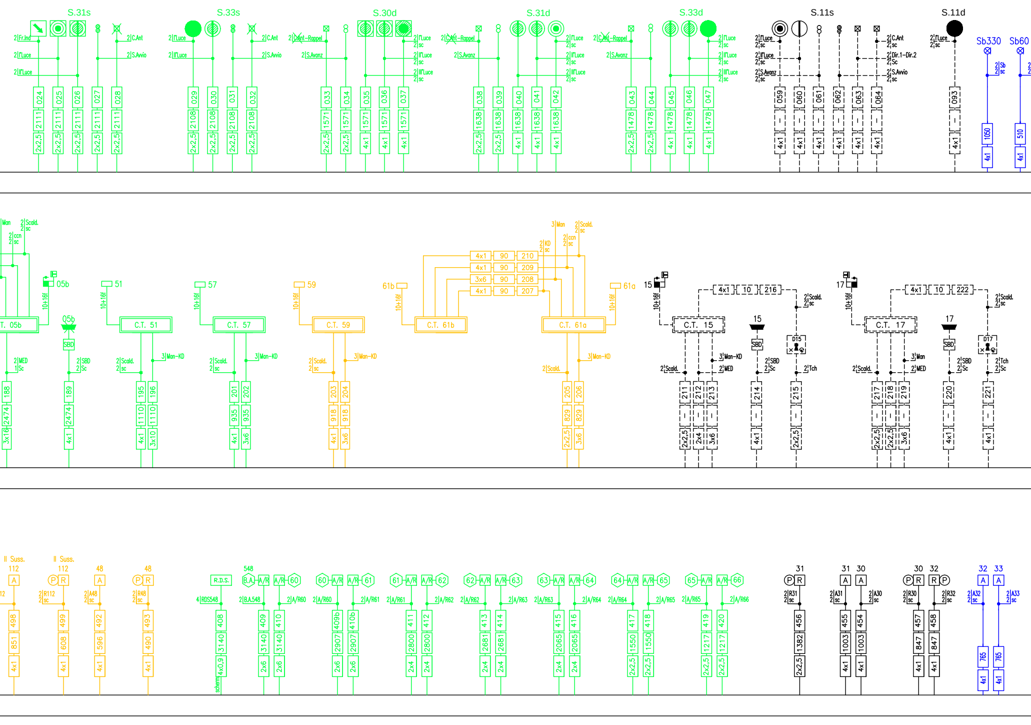

PST 21
2 NL
2 Alim
2 B/L-fs
2 B/L-C
2 Scald.
2 Sc
2 LpBC
2 LpLC
2 LpBfs
2 LpLfs
050 1509 8x1
051 1509 8x1
052 1509 4x1
S.09s
2 I°Luce
2 sc
2 II°Luce
2 sc
2 S.Avanz
2 sc
2 C.Ant
2 sc
2 Dir.1-Dir.2
2 Sc
2 S.Avvio
2 sc
065 066 067 068 069 070
549 4x1
S.09s
2 I°Luce
2 sc
2 II°Luce
2 sc
2 S.Avanz
2 sc
2 C.Ant
2 sc
2 Dir.1-Dir.2
2 Sc
2 Dir.3
2 Sc
2 S.Avvio
2 sc
490 4x1
S.07s
2 I°Luce
2 sc
2 II°Luce
2 sc
2 III°Luce
2 sc
2 C.Ant -Rappel
2 Sc
2 Dir.1-Dir.2
2 Sc
2 Dir.3
2 Sc
2 S.Avanz
2 sc
2 S.Avvio
2 sc
071 072 073 074 075 076 077
463 465 4x1
S.03s
2 Fr.Ind
2 sc
2 I°Luce
2 sc
2 II°Luce
2 sc
2 III°Luce
2 sc
2 C.Ant -Rappel
2 Sc
2 Dir.1-Dir.2
2 Sc
2 S.Avvio
2 sc
2 S.Avanz
2 sc
078 079 080 081 082 083 084 085
463 4x1
2 I°Luce
2 sc
2 II°Luce
2 sc
2 III°Luce
2 sc
086 351 4x1
ARRIVO CAVI ACC – SEGNALI
55
C.T. 55
2 Scald.
2 sc
3 Man-KD
199 1002 4x1
200 1002 3x6
37
10+16f
4x1 10 320
C.T. 37
2 Scald.
3 Man-KD
2 MED
37 SBD
2 SBD
2 sc
D37
2 Scald.
2 sc
2 Tch
2 sc
315 635 2x2,5
316 635 2x2,5
317 635 3x4
318 635 4x1
319 640 4x1
39
10+16f
4x1 10 326
C.T. 39
321 584 4x1
322 584 2x2,5
323 584 3x4
324 584 4x1
325 589 4x1
D39
41
10+16f
4x1 10 332
C.T. 41
327 608 2x2,5
328 608 2x2,5
329 608 3x4
330 608 4x1
331 613 4x1
D41
43
10+16f
4x1 10 338
C.T. 43
333 551 2x2,5
334 551 2x2,5
335 551 3x4
336 551 4x1
337 556 4x1
D43
45
10+16f
4x1 10 344
C.T. 45
339 561 4x1
340 561 2x2,5
341 561 3x4
342 561 4x1
343 566 4x1
D45
14 A/R A/R 15
2 A/R14
2 A/R15
396 1629 2x4
397 1629 2x4
15 A/R A/R 16
2 A/R15
2 A/R16
398 1248 2x2,5
399 1248 2x2,5
16 A/R A/R 17
2 A/R16
2 A/R17
400 841 2x2,5
401 841 2x2,5
17 A/R A/R 18
2 A/R17
2 A/R18
402 739 2x2,5
403 739 2x2,5
A/R 91
2 A/R91
1100 2x2,5
91 A/R A/R 92
2 A/R91
2 sc
2 A/R92
2 sc
750 4x1
18 92 A/R A/R 93 19
A/R18
2 A/R92
2 sc
A/R19
2 A/R93
2 sc
404 612 4x1
405 612 4x1
19 93 A/R A/R II
A/R19
2 A/R93
2 sc
2 A/RII
2 sc
406 569 4x1
407 569 4x1
A/R 95
2 A/R95
1100 2x2,5
66 95 A/R A/R 96 67
A/R66
2 A/R95
A/R67
2 A/R96
421 858 2x2,5
422 858 2x2,5
67 96 A/R A/R 97 68
A/R67
2 A/R96
2 sc
A/R68
2 A/R97
2 sc
423 664 4X1
424 664 4X1
68 97 A/R A/R 98
A/R68
2 A/R97
2 sc
2 A/R98
2 sc
425 574 4x1
425b 574 4X1
98 A/R A/R III
2 A/R98
2 sc
2 A/RIII
2 sc
426b 353 4x1
426 353 4x1
A/R 322
2 A/R322
1100 2x2,5


16
17
18
19
20
21
22
23
S.04s
S.08s
S.08s
S.10s
S.10s
S.12s
S.09d
S.30s
2|C.Ant
2|sc
2|Dir.1−Dir.2
2|Sc
2|S.Avvio
2|sc
2|S.Avanz
2|sc
2|I°Luce
2|II°Luce
087
088
089
090
091
092
351
4x1
095
096
097
098
099
100
372
320
101
102
103
104
105
106
330
107
108
109
110
111
112
444
094
296
021
022
023
2044
2x2,5
47
4x1
10
518
10+16f
C.T. 47
2|Scald.
3|Man−KD
SBD
2|SBD
2|Tch
047
345
346
347
517
584
574
3x4
2|MED
540
2X2,5
3X4
01
177
C.T. 01
2|KED
1|Sc
3|Man
2|AK
2|KD
172
173
527
523
174
175
2714
2x4
3x10
2x2,5
4x2,5
3x25
D01
2|AKTch
2|KTch
2|Blocc
2|Lib
176
531
532
2711
03
183
C.T. 03
178
179
180
181
2600
D03
182
533
534
05a
4x1
105
190
100
194
193
3x10
192
191
530
C.T. 05a
D05
184
535
536
2470
185
186
187
2423
2x6
3x16
2|KED
2|KD
2|AK
322
A/R
323
324
IV
2|A/R322
2|A/R323
2|A/R324
2|A/RIV
595
490
345
40
41
42
43
I Suss.
111
46
69
IV'
IV''
V
P
R
A
2|R40
2|A40
2|R41
2|A41
2|A42
2|R42
2|R43
2|A43
2|R111
2|A111
2|A46
2|R46
2|A69
2|R69
2|RIV'
2|AIV'
2|AIV''
2|AV
476
477
509
478
479
480
481
482
489
490
491
500
512
513
514
515
516
496
1308
1138
928
1101
941
887
880
560
619
410
357
302
372
820
821
V
2|A/R820
2|A/R821
2|A/RV
1100
640
365

* C.T. per cambio sezione cavo MD
Da ubicare in prossimità della C.T. Dev.

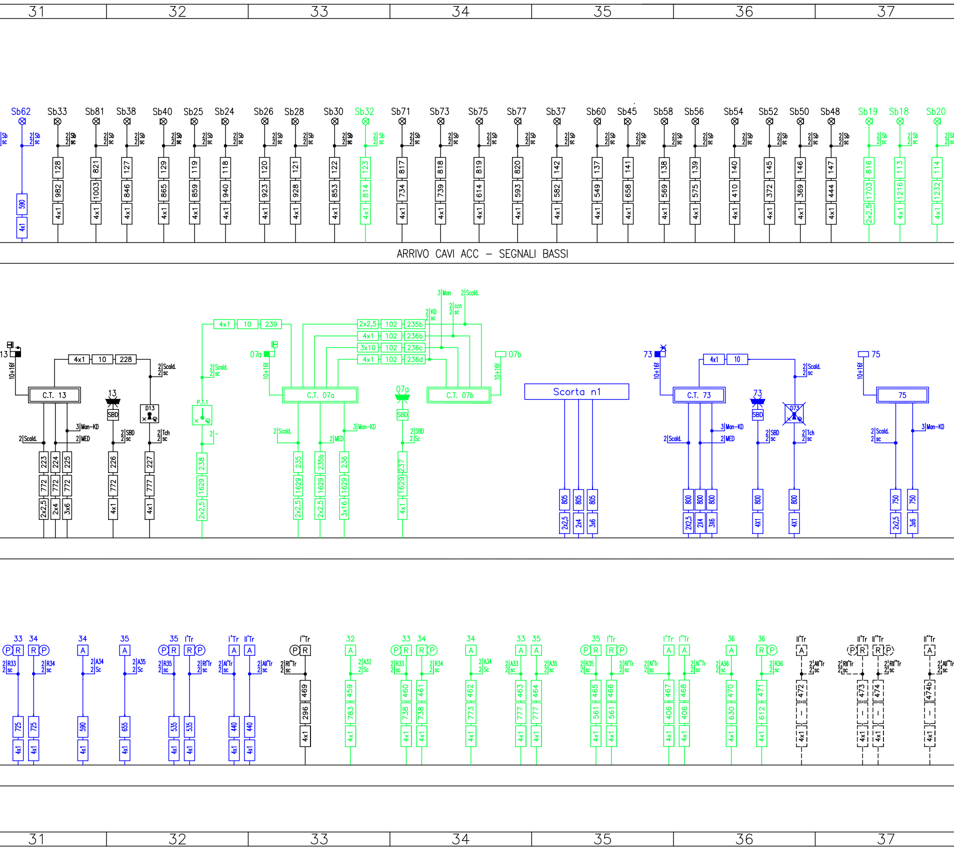
ARRIVO CAVI ACC – CdB Codificati E Tradizionali

24 25 26 27 28 29 30



S.31s
S.33s
S.30d
S.31d
S.33d
S.11s
S.11d
Sb330
Sb60
2 Fr.Ind
2 I°Luce
2 II°Luce
2 C.Ant
2 S.Avvio
2 C.Ant-Rappel
2 S.Avanz
2 III°Luce
2 sc
2 Dir.1-Dir.2
024
025
026
027
028
029
030
031
032
033
034
035
036
037
038
039
040
041
042
043
044
045
046
047
059
060
061
062
063
064
093
2111
2108
1571
1638
1478
1050
510
2x2,5
4x1
05b
51
57
59
61b
61a
15
17
10+16f
C.T. 05b
C.T. 51
C.T. 57
C.T. 59
C.T. 61b
C.T. 61a
C.T. 15
C.T. 17
SBD
D15
D17
3 Man
2 Scald.
2 ccn
2 KD
2 MED
1 Sc
2 SBD
2 Sc
3 Man-KD
2 Tch
4x1 90 210
4x1 90 209
3x6 90 208
4x1 90 207
4x1 10 216
4x1 10 222
188
189
195
196
201
202
203
204
205
206
211
212
213
214
215
217
218
219
220
221
2474
1110
935
918
829
3x16
3x10
3x6
2x4
II Suss.
112
48
A
P R
R.D.S.
548
B.A.
A/R
60
61
62
63
64
65
66
2 R112
2 A48
2 R48
4 RDS548
2 B.A.548
2 A/R60
2 A/R61
2 A/R62
2 A/R63
2 A/R64
2 A/R65
2 A/R66
498
499
492
493
408
409
410
409b
410b
411
412
413
414
415
416
417
418
419
420
851
608
596
490
3140
2907
2800
2681
2065
1550
1217
4x0,9
scherm.
2x6
31
30
32
33
2 R31
2 A31
2 A30
2 R30
2 R32
2 A32
2 A33
456
455
454
457
458
1382
1003
847
765

24 25 26 27 28 29 30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34
35
36
37
Sb62
Sb33
Sb81
Sb38
Sb40
Sb25
Sb24
Sb26
Sb28
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Sb32
Sb71
Sb73
Sb75
Sb77
Sb37
Sb60
Sb45
Sb58
Sb56
Sb54
Sb52
Sb50
Sb48
Sb19
Sb18
Sb20
2 Sb
2 sc
590
128
982
821
1003
127
846
129
865
119
859
118
940
120
923
121
928
122
853
123
814
817
734
818
739
819
614
820
593
142
582
137
549
141
658
138
569
139
575
140
410
145
372
146
369
147
444
816
1703
2x2,5
113
1216
114
1232
4x1
ARRIVO CAVI ACC – SEGNALI BASSI
13
10+16f
C.T. 13
4x1
10
228
2 Scald.
2 sc
3 Man-KD
2 MED
SBD
D13
2 SBD
2 sc
2 Tch
2 sc
223
224
225
226
227
772
777
2x2,5
2x4
3x6
P.T.1
2 Scald.
2 sc
2 –
238
1629
239
07a
C.T. 07a
C.T. 07b
07b
3 Man
2 Scald.
2 KD
2 sc
2 ccn
2 sc
2x2,5
102
235b
236b
3x10
236c
236d
3 Man-KD
2 MED
235
236
3x16
237
Scorta n1
805
2x2,5
2x4
3x6
73
C.T. 73
D73
800
2X2,5
2X4
3X6
4X1
75
750
33
34
35
I'Tr
II'Tr
I''Tr
II''Tr
I'''Tr
II'''Tr
36
P
R
A
2 R33
2 R34
2 A34
2 A35
2 R35
2 RI'Tr
2 AI'Tr
2 AII'Tr
2 RI''Tr
2 A32
2 A33
2 RI''Tr
2 AI''Tr
2 AII''Tr
2 A36
2 R36
2 AII'''Tr
2 RII'''Tr
2 AII'''Tr
725
590
655
535
440
469
296
459
783
460
738
461
462
773
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777
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561
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467
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612
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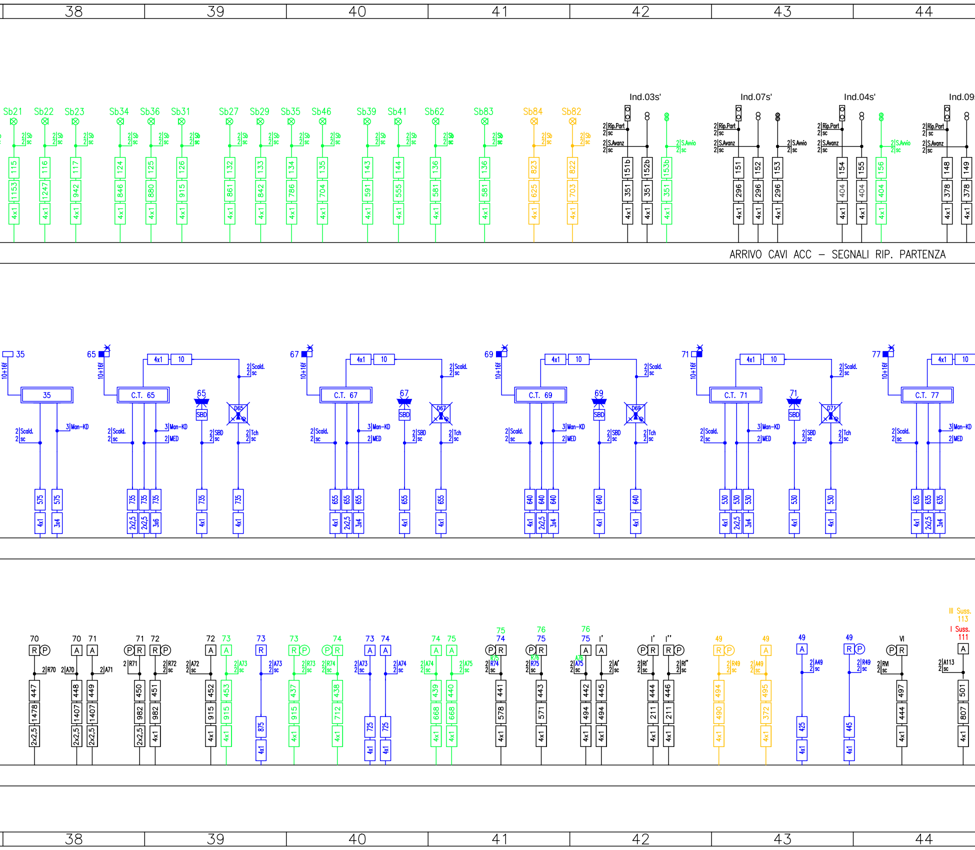
474
474b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39
40
41
42
43
44
Sb21
Sb22
Sb23
Sb34
Sb36
Sb31
Sb27
Sb29
Sb35
Sb46
Sb39
Sb41
Sb62
Sb83
Sb84
Sb82
Ind.03s'
Ind.07s'
Ind.04s'
Ind.09
Rip.Part
S.Avanz
S.Avvio
115 1153 4x1
116 1247 4x1
117 942 4x1
124 846 4x1
125 880 4x1
126 915 4x1
132 861 4x1
133 842 4x1
134 786 4x1
135 704 4x1
143 591 4x1
144 555 4x1
136 581 4x1
136 581 4x1
823 625 4x1
822 703 4x1
151b 351 4x1
152b 351 4x1
153b 351 4x1
151 296 4x1
152 296 4x1
153 296 4x1
154 404 4x1
155 404 4x1
156 404 4x1
148 378 4x1
149 378 4x1
ARRIVO CAVI ACC – SEGNALI RIP. PARTENZA
35
65
67
69
71
77
10+16f
4x1
10
C.T. 65
C.T. 67
C.T. 69
C.T. 71
C.T. 77
SBD
D65
D67
D69
D71
Scald.
Man-KD
MED
Tch
575 4x1
575 3x4
735 2x2,5
735 2x2,5
735 3x6
735 4x1
735 4x1
655 4x1
655 2x2,5
655 3x4
655 4x1
655 4x1
640 4x1
640 2x2,5
640 3x4
640 4x1
640 4x1
530 4x1
530 2x2,5
530 3x4
530 4x1
530 4x1
635 4x1
635 2x2,5
635 3x4
70
71
72
73
74
75
76
I'
I''
49
VI
III Suss. 113
I Suss. 111
R
P
A
R70
A70
A71
R71
R72
A72
A73
R73
R74
A74
A75
R75
Rl'
Rl''
Al'
R49
A49
RVI
A113
447 1478 2x2,5
448 1407 2x2,5
449 1407 2x2,5
450 982 2x2,5
451 982 4x1
452 915 4x1
453 915 4x1
875 4x1
437 915 4x1
438 712 4x1
725 4x1
725 4x1
439 668 4x1
440 668 4x1
441 578 4x1
443 571 4x1
442 494 4x1
445 494 4x1
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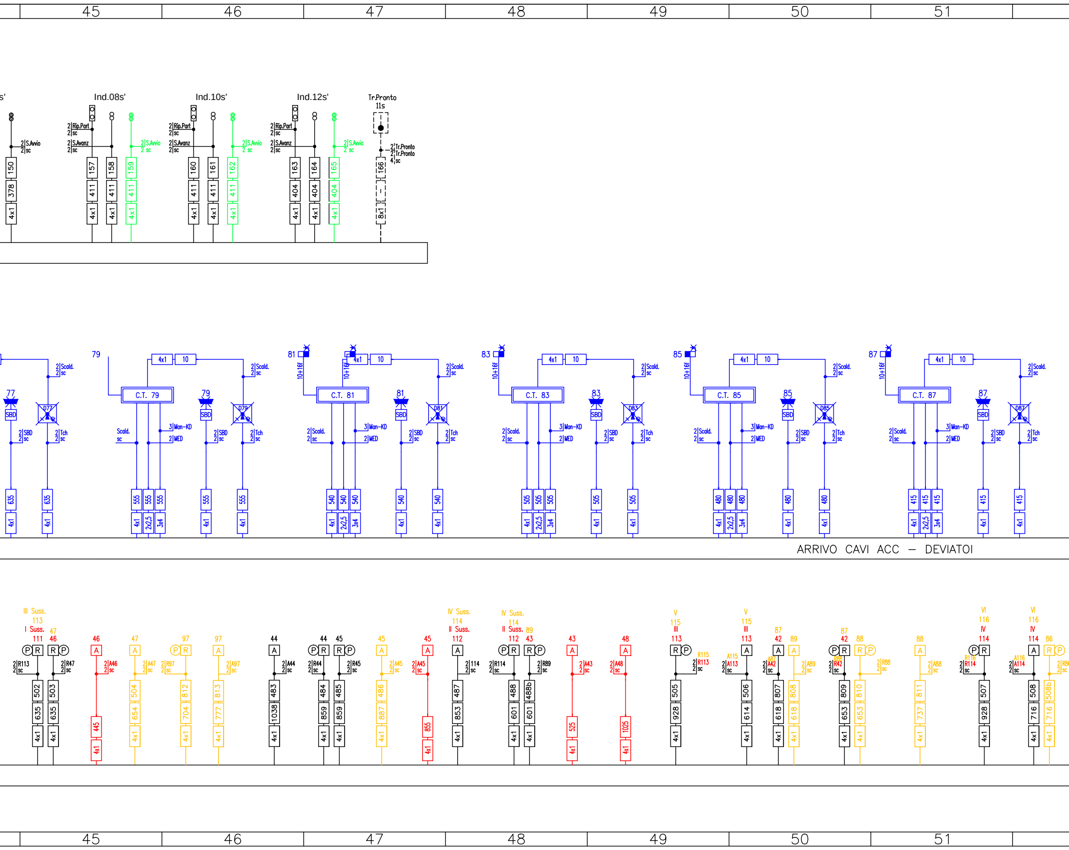
497 444 4x1
501 807 4x1
sc


45
46
47
48
49
50
51
Ind.08s'
Ind.10s'
Ind.12s'
Tr.Pronto
11s
Rip.Part
S.Avanz
S.Avvio
Tr.Pronto
150
378
157
158
159
160
161
162
163
164
165
166
411
404
4x1
8x1
79
81
83
85
87
C.T. 79
C.T. 81
C.T. 83
C.T. 85
C.T. 87
10+16f
4x1
10
Scald.
SBD
Tch
Man-KD
MED
77
D77
D79
D81
D83
D85
D87
635
555
540
505
480
415
2x2,5
3x4
ARRIVO CAVI ACC – DEVIATOI
III Suss.
I Suss.
IV Suss.
II Suss.
113
111
112
114
115
116
R113
R47
A46
A47
R97
A44
R44
R45
A45
R114
R89
A43
A48
R115
A115
A113
A42
A89
R42
R88
A88
R116
A114
A116
502
503
504
812
813
483
484
485
486
487
488
488b
505
506
807
808
809
810
811
507
508
508b
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704
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1038
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887
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853
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525
1025
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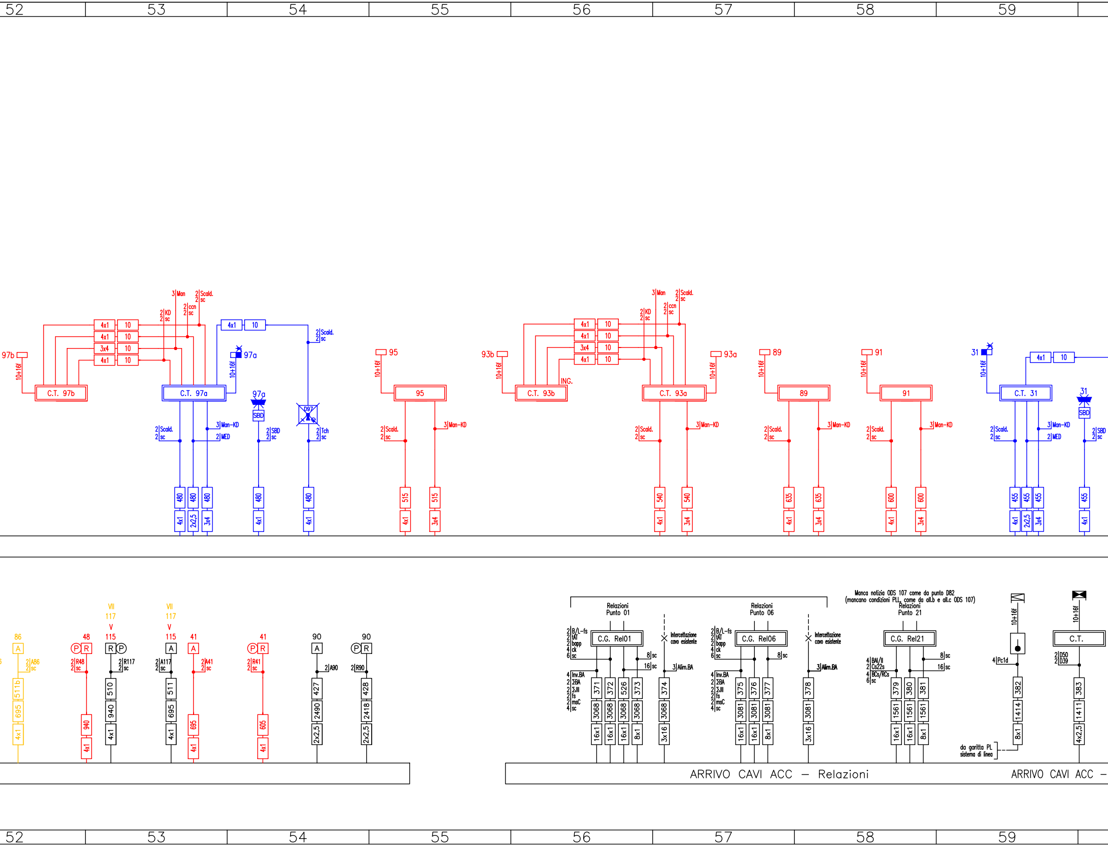
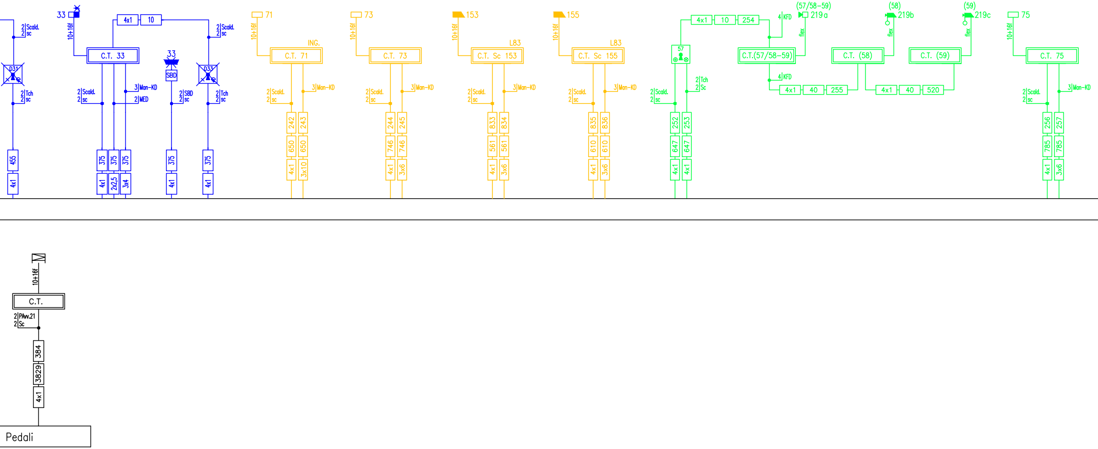
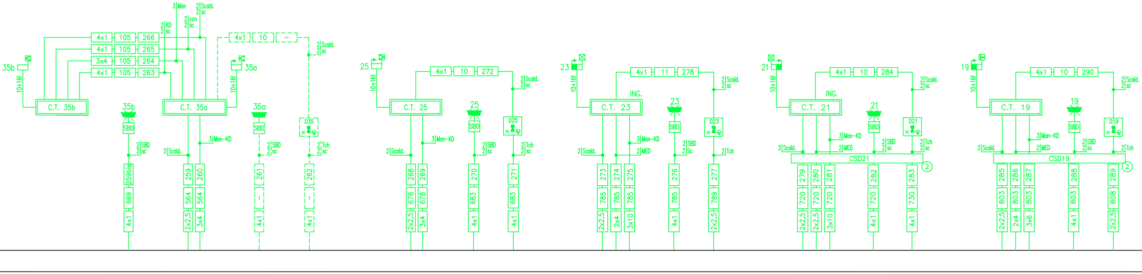
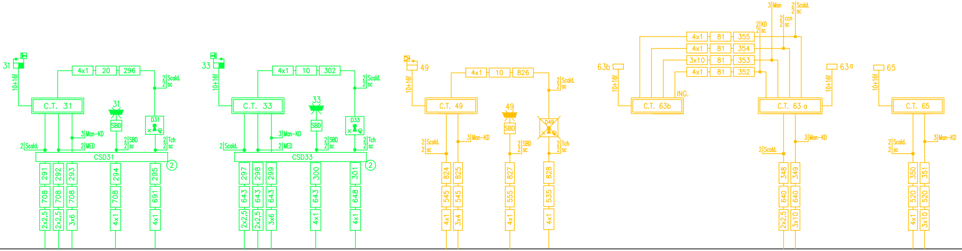
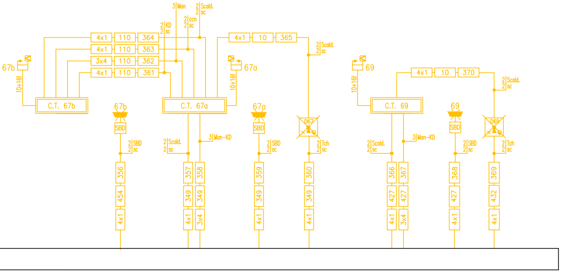
614
618
653
737
716


52
53
54
55
56
57
58
59
C.T. 97b
97b
10+16f
4x1
3x4
10
2|KD
2|sc
3|Man
2|ccn
2|sc
2|Scald.
2|sc
C.T. 97a
97a
SBD
D97
2|Scald.
2|sc
3|Man-KD
2|MED
2|SBD
2|sc
2|Tch
2|sc
480
2x2,5
95
3|Man-KD
515
93b
C.T. 93b
ING.
C.T. 93a
93a
540
89
635
91
600
31
C.T. 31
455
86
A
2|A86
2|sc
511b
695
48
P
R
2|R48
2|sc
940
VII
117
V
115
2|R117
2|sc
510
2|A117
2|sc
511
41
2|A41
2|sc
2|R41
2|sc
605
90
2|A90
427
2490
2|R90
428
2418
Relazioni
Punto 01
C.G. Rel01
2|B/L-fs
2|tAT
2|bapp
4|ck
6|sc
4|Inv.BA
2|ΣBA
2|ΣJII
2|fs
2|msC
4|sc
8|sc
16|sc
371
372
526
373
3068
16x1
8x1
Intercettazione
cavo esistente
3|Alim.BA
374
3x16
Relazioni
Punto 06
C.G. Rel06
375
376
377
3081
378
Manca notizia ODS 107 come da punto D82
(mancano condizioni PLL come da all.b e all.c ODS 107)
Relazioni
Punto 21
C.G. Rel21
4|BAI/II
2|Cs22s
4|BCs/RCs
6|sc
379
380
381
1561
4|Pc1d
382
1414
da garitta PL
sistema di linea
C.T.
2|D50
2|D39
383
1411
4x2,5
ARRIVO CAVI ACC — Relazioni
ARRIVO CAVI ACC —


33
10+16f
4x1
10
C.T. 33
2|Scald.
2|sc
D31
D33
2|Tch
2|sc
3|Man-KD
2|MED
33
SBD
2|SBD
2|sc
455
375
4x1
2x2,5
3x4
71
73
153
155
ING.
L83
C.T. 71
C.T. 73
C.T. Sc 153
C.T. Sc 155
242
243
650
3x10
244
245
746
3x6
833
834
561
835
836
610
57
254
4|KFD
flex
(57/58-59)
219a
(58)
219b
(59)
219c
C.T.(57/58-59)
C.T. (58)
C.T. (59)
40
255
520
252
253
647
75
C.T. 75
256
257
785
C.T.
2|PAw.21
2|Sc
384
3829
Pedali


35b
10+16f
C.T. 35b
4x1 105 266
4x1 105 265
3x4 105 264
4x1 105 263
2 KD 2 sc
3 Man
2 ccn 2 sc
2 Scald. 2 sc
C.T. 35a
35a
10+16f
4x1 10 –
2 Scald. 2 sc
35b
SBD
2 SBD 2 sc
259bis 669 4x1
2 Scald.
3 Man-KD
259 564 2x2,5
260 564 3x4
35a
SBD
2 SBD 2 sc
261 – 4x1
D35
2 Tch 2 sc
262 – 4x1
25
10+16f
C.T. 25
4x1 10 272
2 Scald. 2 sc
2 Scald.
3 Man-KD
268 678 2x2,5
269 678 3x4
25
SBD
2 SBD 2 sc
270 683 4x1
D25
2 Tch 2 sc
271 683 4x1
23
10+16f
C.T. 23
ING.
4x1 11 278
2 Scald. 2 sc
2 Scald.
3 Man-KD
2 MED
273 785 2x2,5
274 785 2x4
275 785 3x10
23
SBD
2 SBD 2 Sc
276 785 4x1
D23
2 Tch
277 789 2x2,5
21
10+16f
C.T. 21
ING.
4x1 10 284
2 Scald. 2 sc
2 Scald.
3 Man-KD
2 MED
21
SBD
2 SBD 2 sc
D21
2 Tch 2 sc
CSD21
②
279 720 2x2,5
280 720 2x2,5
281 720 3x10
282 720 4x1
283 730 4x1
19
10+16f
C.T. 19
4x1 10 290
2 Scald. 2 sc
2 Scald.
3 Man-KD
2 MED
19
SBD
2 SBD 2 sc
D19
2 Tch
CSD19
②
285 803 2x2,5
286 803 2x4
287 803 3x6
288 803 4x1
289 808 2x2,5


31
10+16f
C.T. 31
4x1
20
296
2|Scald.
2|sc
31
SBD
D31
3|Man-KD
2|Scald.
2|MED
2|SBD
2|sc
2|Tch
2|sc
CSD31
②
291
292
293
294
295
708
708
708
708
691
2x2,5
2x2,5
3x6
4x1
4x1
33
10+16f
C.T. 33
4x1
10
302
2|Scald.
2|sc
33
SBD
D33
3|Man-KD
2|Scald.
2|MED
2|SBD
2|sc
2|Tch
2|sc
CSD33
②
297
298
299
300
301
643
643
643
643
648
2x2,5
2x2,5
3x6
4x1
4x1
49
10+16f
C.T. 49
4x1
10
826
2|Scald.
2|sc
49
SBD
D49
2|Scald.
2|sc
3|Man-KD
2|SBD
2|sc
2|Tch
2|sc
824
825
827
828
545
545
555
535
4x1
3x4
4x1
4x1
63b
10+16f
C.T. 63b
ING.
4x1
81
355
4x1
81
354
3x10
81
353
4x1
81
352
3|Man
2|Scald.
2|sc
2|ccn
2|sc
2|KD
2|sc
63a
10+16f
C.T. 63 a
2|Scald.
3|Man-KD
348
349
640
640
2x2,5
3x10
65
10+16f
C.T. 65
2|Scald.
2|sc
3|Man-KD
350
351
520
520
4x1
3x10


3 Man
2 Scald.
2 sc
2 ccn
2 sc
2 KD
2 sc
4x1 110 364
4x1 110 363
3x4 110 362
4x1 110 361
4x1 10 365
2 Scald.
2 sc
67b
10+16f
67a
10+16f
69
10+16f
4x1 10 370
2 Scald.
2 sc
C.T. 67b
C.T. 67a
C.T. 69
67b
SBD
2 SBD
2 sc
2 Scald.
2 sc
3 Man-KD
67a
SBD
2 SBD
2 sc
D67
2 Tch
2 sc
2 Scald.
2 sc
3 Man-KD
69
SBD
2 SBD
2 sc
D69
2 Tch
2 sc
356
454
4x1
357
349
4x1
358
349
3x4
359
349
4x1
360
349
4x1
366
427
4x1
367
427
3x4
368
427
4x1
369
432
4x1

COMMITTENTE:

RFI RETE FERROVIARIA ITALIANA
GRUPPO FERROVIE DELLO STATO ITALIANE

PROGETTAZIONE:

ITALFERR
GRUPPO FERROVIE DELLO STATO ITALIANE

CUP: J47I09000030009

U.O. TECNOLOGIE NORD

PROGETTO DEFINITIVO

POTENZIAMENTO DELLA LINEA MILANO - GENOVA
QUADRUPLICAMENTO TRATTA MILANO ROGOREDO - PAVIA
FASE 2 - QUADRUPLICAMENTO MI ROGOREDO - PIEVE EMANUELE

PAVIA - LATO NORD

Piano Cavi IS [Fase 2.5]
Foglio 1 di 2

SCALA:
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COMMESSA	LOTTO	FASE	ENTE	TIPO DOC.	OPERA/DISCIPLINA	PROGR.	REV.
NM0Z	20	D	58	DX	AS0000	357	A

Rev.	Descrizione	Redatto	Data	Verificato	Data	Approvato	Data	Autorizzato Data
A	Emissione esecutiva	L. Salustri	11.2018	M.Messina	11.2018	S.Borelli	11.2018	M.Gambaro 11.2018 GAMBARO MARIO

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