



RADIATORS CATALOG FOR EARTH-MOVING TRACTORS

Edition 01/2017

Italia **RAAL**[®]
complete cooling solutions

INTRODUCTION

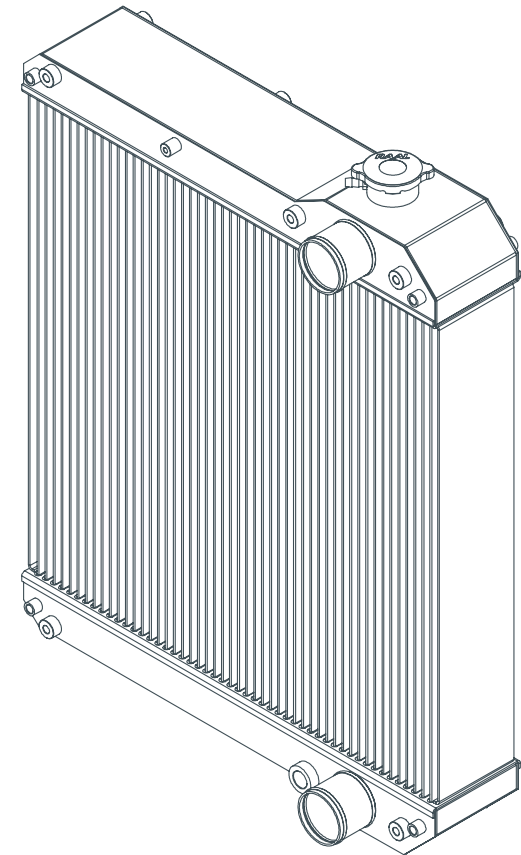
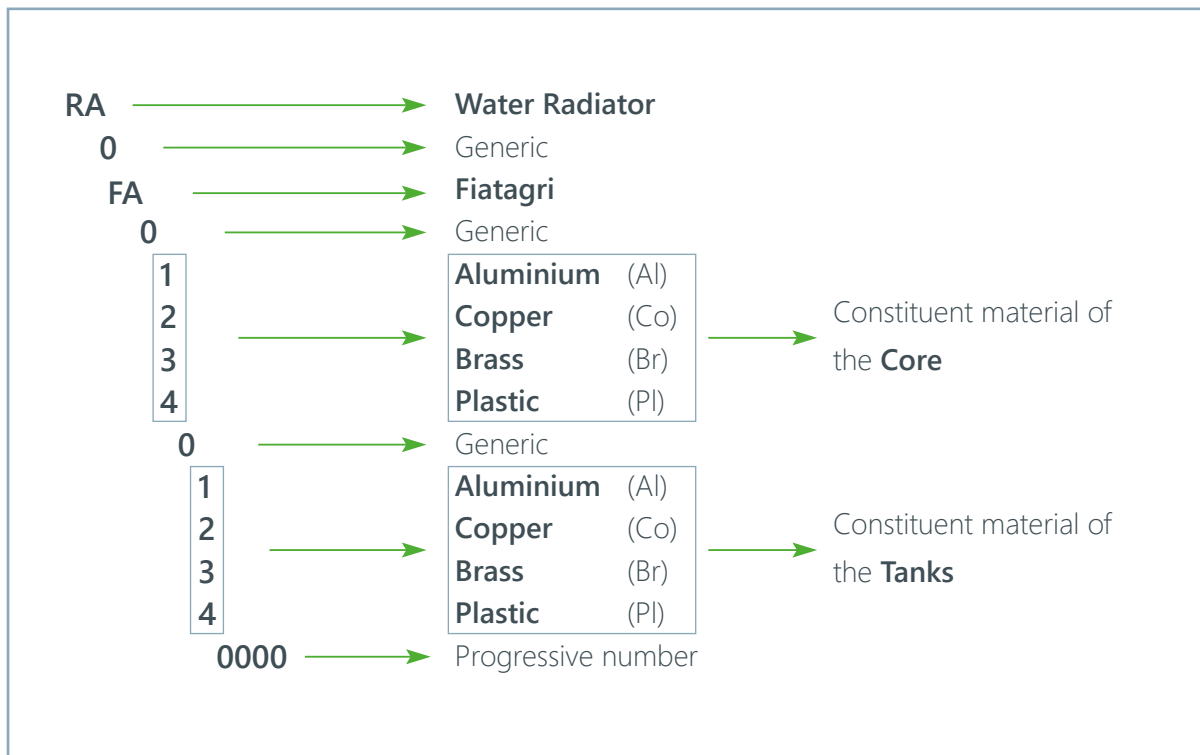
RAAL ITALY is the Italian official seat of **RAAL S.A.** - Romania, the leader industry in the production of complete cooling systems, brazed aluminum heat exchangers.

RAAL has invested in technology and equipment, and today it's able to meet the needs of each market sector.

RAAL ITALY, in order to offer a wider range of products, is now able to meet a new sector that of the **"tractor specialists"**, to give at the service of the agricultural vehicle the possibility to having a spare, in different construction systems (aluminum-plastic, aluminum-aluminum or copper-brass). The peculiarity of **RAAL ITALY** service remains always the same: product quality, delivery speed, service and friendliness.



HOW TO READ OUR CODES



EXAMPLE:

- RA0FA0230023** → Fiatagri model with **copper** core and **brass** tanks, number 23
- RA0FA0140032** → Fiatagri model with **aluminium** core and **plastic** tanks, number 32

PRODUCTS LIST



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0FA0230008	585465	FIAT 211 - 245 - 231 - 214 - 251	360 x 343 x [*]	Co - Br	Drawing 1	14
RA0FA0230015	597351	FIAT 250 - 300	360 x 343 x [*]	Co - Br	Drawing 2	14
RA0FA0230022	4952473 - 4970998	FIAT 355 - 450 - 455 - 480	360 x 470 x [*]	Co - Br	Drawing 3	14
RA0FA0230023	4952473 - 4970998 - 69017582	FIAT AGRI 455 - 640 COMPACT Oversized	360 x 470 x [*]	Co - Br	Drawing 4	15
RA0FA0230031	5156033 - 5128854	FIAT 640 VIGNETO	383 x 465 x [*]	Co - Br	Drawing 5	15
RA0FA0230036	5156033 - 5128854	FIAT AGRI 455 COMPACT Second Series Oversized	383 x 465 x [*]	Co - Br	Drawing 6	15
RA0FA0140031	5156033	FIAT 640 VIGNETO Oversized	386 x 463 x [*]	Al - Pl	Drawing 7	15
RA0FA0230003	44907605	FIAT 35 - 66	406 x 350 x [*]	Co - Br	Drawing 8	15
RA0FA0230030	5104835	FIAT 570-90/91	442 x 465 x [*]	Co - Br	Drawing 9	15
RA0FA0230006	4973345 - 5001561 - 5991105	FIAT AGRI 500-550-605 FL4C 3FL	442 x 465 x [*]	Co - Br	Drawing 10	16
RA0FA0230019	4952983 - 5002561 - 4973345	FIAT 500 - 540 - 550 - 555 - 605 C1	442 x 465 x [*]	Co - Br	Drawing 11	16
RA0FA0140006	4973345 - 5001561 - 5991105	FIAT AGRI 500-550-605 FL4C 3FL	442 x 465 x [*]	Al - Pl	Drawing 12	16
RA0FA0230012	5153481 - 5139027 - 5096597 - 5104835	FIAT AGRI 640/90 HP 4FL	442 x 465 x [*]	Co - Br	Drawing 13	16
RA0FA0140012	5153481 - 5139027 - 5096597 - 5104835	FIAT AGRI 640/90 HP 4FL	442 x 465 x [*]	Al - Pl	Drawing 14	16
RA0FA0140070	5153483	FIAT 72 - 85	445 x 460 x [*]	Al - Pl	Drawing 15	16
RA0FA0230001	5100304	FIAT 70 86V - 400 - 420	447 x 350 x [*]	Co - Br	Drawing 16	17
RA0FA0230020	588156 - 595568	FIAT 315-415	458 x 420 x [*]	Co - Br	Drawing 17	17
RA0FA0230005	576976	FIAT AGRI 411-FL4 1^ s. 3FL	470 x 420 x [*]	Co - Br	Drawing 18	17
RA0FA0230016	576975	FIAT 311-312-331-332-351-352	470 x 420 x [*]	Co - Br	Drawing 19	17
RA0FA0230024	4951038 - 4951039	FIAT AGRI 800-1000 4FL	490 x 540 x [*]	Co - Br	Drawing 20	17

* The shown dimensions are **indicative** because they can vary according to the construction system.



RA0FA0230025	5159617 - 5153483 - 4997175	FIAT AGRI 680-740 NH 55-90-90 3FL	500 x 540 x [*]	Co - Br	Drawing 21	17
RA0FA0230026	5167365 - 5156059	FIAT AGRI 780-980 4FL	500 x 540 x [*]	Co - Br	Drawing 22	18
RA0FA0230027	5103110 - 5109294	FIAT AGRI 1180-1380 NH 110-130 4FL	630 x 540 x [*]	Co - Br	Drawing 23	18
RA0FA0230032	5119698 - 5123208 - 5106827 - 5109293	FIAT 1180-130-90DT-180 4FL	695 x 540 x [*]	Co - Br	Drawing 24	18
RA0FA0230035	5129229 - 5123208 - 5119698 - 5129	FIAT 1580 - 180/90 SYSTEM POWER 4FL	695 x 540 x [*]	Co - Br	Drawing 25	18
GR0NH0110098	86011668 - 290022 - 290022P - 270154 - 280015 - 1E4413	G170 - G190 - G210 - G240	530 x 360 x 80 oil 530 x 412 x 80 air	Al - Al	Drawing 26	18



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0NH0110094	234876A1 - 239739A1 - 239739A2 - 234876A2 - 234876A - 234882A1	P85 - PX110 - S110 - SE110 - S70 - SE70 - S85 - SE85 - 590SL - 590SM - P70 - P110 - PX70 - PX85 - U80	470 x 516 x 102	Al - Al	Drawing 1	19
RA0NH0230033	5161005	65/94 - 72/94 - 82/94 - 88/94	510 x 540 x [*]	Co - Br	Drawing 2	19
RA0NH0110095	135690A3 - 135691A3 - 244295A1	S140 - SE140 - S170 - SE170	570 x 564 x 102	Al - Al	Drawing 3	19
RA0NH0110184	702605 - 82033774 - 87306756 - 87306757	T6010 - T6020 - T6030 - TS100A - TS110A - TS115A - TS125A - TS135A - TS6020 - TS6030	597 x 541 x 114	Al - Al	Drawing 4	20
RA0NH0230034	5150030 - 5158743 - 5167367	WINNER F110 - F115 - F120 - F130	630 x 540 x [*]	Co - Br	Drawing 5	20
RA0NH0110185	82013306 - A82013306	TM115 - TM125 - 8160 - 8260	635 x 564 x 102	Al - Al	Drawing 6	20
GR0NH0110098	86011668 - 290022 - 290022P - 270154 - 280015 - 1E4413	G170 - G190 - G210 - G240 - 8670 - 8670A - 8770 - 8770A - 8870 - 8870A - 8970 - 8970A	530 x 360 x 80 oil 530 x 412 x 80 air	Al - Al	Drawing 7	20



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0CA0230014	47921036	CARRARO LDW 1204	296 x 454 x [*]	Co - Br	Drawing 1	21
RA0CA0230011	47921031	CARRARO LDW 903	297 x 454 x [*]	Co - Br	Drawing 2	21
GR0CA0230011	47921035	CARRARO LDW 903 + 16 PLATES COOLER	297 x 454 x [*]	Co - Br	Drawing 3	21
GR0CA0230018	47921027	3800 HST with MOTOR LDW 1503 M.A.	327 x 350 x [*]	Co - Br	Drawing 4	22
RA0CA0230018	0	3800 HST with MOTOR LDW 1503 M.A. - H ₂ O	327 x 350 x [*]	Co - Br	Drawing 5	22
RO0CA0110018	0	3800 HST with MOTOR LDW 1503 M.A. - OIL	325 x 101 x [*]	Al - Al	Drawing 6	22

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Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0CA0230028	0	CARRARO 097	335 x 400 x [*]	Co - Br	Drawing 7	22
RA0CA0230001	0	CARRARO TIGRONE	335 x 395 x [*]	Co - Br	Drawing 8	22
GR0CA0230002	0	3800 HST with MOTOR LDW 1503	336 x 360 x [*]	Co - Br	Drawing 9	22
RA0CA0230002	0	3800 HST with MOTOR LDW 1503 - H ₂ O	336 x 360 x [*]	Co - Br	Drawing 10	23
RO0CA0110002	0	3800 HST with MOTOR LDW 1503 - OIL	325 x 91 x [*]	Al - Al	Drawing 11	23
RA0CA0230006	47921015	CARRARO LDW 1503	375 x 386 x [*]	Co - Br	Drawing 12	23
GR0CA0230006	0	CARRARO LDW 1503 + L SERIES 16 PLATES	375 x 386 x [*]	Co - Br	Drawing 13	23
RA0CA0230003	47921006	CARRARO 394 - 3 ROWS	375 x 386 x [*]	Co - Br	Drawing 14	23
RA0CA0230025	47921106/06	CARRARO C106 - 3 ROWS	375 x 386 x [*]	Co - Br	Drawing 15	23
RA0CA0230050	0	CARRARO C106 - 3 ROWS - SALD. COLL.	375 x 386 x [*]	Co - Br	Drawing 16	24
RA0CA0230023	47921104/05	CARRARO C104 - 4 ROWS	375 x 386 x [*]	Co - Br	Drawing 17	24
RA0CA0230051	0	CARRARO C104 - 4 ROWS - SALD. COLL.	375 x 386 x [*]	Co - Br	Drawing 18	24
RA0CA0230031	47921121/02	CARRARO 121	375 x 386 x [*]	Co - Br	Drawing 19	24
RA0CA0230033	0	CARRARO 121 - SALD. COLL	375 x 386 x [*]	Co - Br	Drawing 20	24
RA0CA0230017	47921044	CARRARO 044	375 x 386 x [*]	Co - Br	Drawing 21	24
RA0CA0230004	47921007	CARRARO 349 - 4 ROWS	375 x 386 x [*]	Co - Br	Drawing 22	25
RA0CA0230013	47921034	CARRARO LDW 2004	375 x 386 x [*]	Co - Br	Drawing 23	25
RA0CA0230022	47921082	CARRARO 082	375 x 390 x [*]	Co - Br	Drawing 24	25
RA0CA0230015	47921038	CARRARO FOX 903	375 x 394 x [*]	Co - Br	Drawing 25	25
GR0CA0230015	47921039	CARRARO FOX 903 + 16 PLATES COOLER	375 x 394 x [*]	Co - Br	Drawing 26	25
RA0CA0230007	47921016	CARRARO TIGRONE	382 x 460 x [*]	Co - Br	Drawing 27	25
RA0CA0230019	0	CARRARO 053	385 x 475 x [*]	Co - Br	Drawing 28	26
RA0CA0230020	47921070	CARRARO 070	386 x 432 x [*]	Co - Br	Drawing 29	26
RA0CA0230052	0	CARRARO 070 - H ₂ O	386 x 432 x [*]	Co - Br	Drawing 30	26
RA0CA0230012	47921033	CARRARO LDW 1204	388 x 373 x [*]	Co - Br	Drawing 31	26
GR0CA0230027	47921083/04	CARRARO 083 - COMB. H ₂ O - OIL	438 x 330 x [*]	Co - Br	Drawing 32	26
RA0CA0230027	0	CARRARO 083 - H ₂ O	438 x 330 x [*]	Co - Br	Drawing 33	26
RO0CA0230027	0	CARRARO 083 - OIL	432 x 100 x [*]	Co - Br	Drawing 34	27
RA0CA0230032	47921105/02	CARRARO 105 CORRUGATED	444 x 465 x [*]	Co - Br	Drawing 35	27
RA0CA0230055	47921105/02	CARRARO 105 Corrugated - SALD. COLL.	444 x 465 x [*]	Co - Br	Drawing 36	27

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Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
GROCA0230021	47921067	CARRARO 067	465 x 430 x [*]	Co - Br	Drawing 37	27
RA0CA0230021	0	CARRARO 067 - H ₂ O	465 x 430 x [*]	Co - Br	Drawing 38	27
RO0CA0230021	0	CARRARO 067 - OIL	433 x 110 x [*]	Co - Br	Drawing 39	27



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0NH0110094	234876A1 - 239739A1 - 239739A2 - 234876A2 - 234876A - 234882A1	570LXT - 570MXT - 580 SUPER L - 580L - 580M - 580SL - 580SM - 590 SUPER L - 4391 - 4391T - 4391TA - 584E - 585E - 585G - 586E - 586G - 588G	470 x 516 x 102	Al - Al	Drawing 1	28
RA0NH0110095	135690A3 - 135691A3 - 244295A1	MX100 - MX110 - MX120 - MX135 - MX150 - MX170 - P140 - PX140 - P170 - PX170 - 6591T - 6591TA	570 x 564 x 102	Al - Al	Drawing 2	28
RA0NH0110184	702605 - 82033774 - 87306756 - 87306757	MXU100 - MXU110 - MXU115 - MXU115 Value - MXU125 - MXU135 - 100 Maxxum - 110 Maxxum - 125A Maxxum - 135A Maxxum - 110A - 120A - 125A - 140A	597 x 541 x 114	Al - Al	Drawing 3	28



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0DE0110002	00919420000 - 00916190000 - 00917920000 - 7531895 - 04251396KZ - 04259456KZ - 1100019200 - 0091.942.0000 - 0091.619.0000 - 0091.792.0000	DEUTZ SMALL	398 x 260 x 95	Al - Al	Drawing 1	29
RA0DE0110018		DEUTZ BIG	398 x 440 x 95	Al - Al	Drawing 2	29
RA0DE0110035		DEUTZ GRAND MODEL	398 x 660 x 95	Al - Al	Drawing 3	29



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0NH0110094	234876A1 - 239739A1 - 239739A2 - 234876A2 - 234876A - 234882A1	P85 - PX110 - S110 - SE110 - S70 - SE70 - S85 - SE85 - 590SL - 590SM - P70 - P110 - PX70 - PX85 - U80	470 x 516 x 102	Al - Al	Drawing 1	30
RA0NH0110184	702605 - 82033774 - 87306756 - 87306757	T6010 - T6020 - T6030 - TS100A - TS110A - TS115A - TS125A - TS135A - TS6020 - TS6030	597 x 541 x 114	Al - Al	Drawing 2	30
RA0NH0110185	82013306 - A82013306	TM115 - TM125 - 8160 - 8260	635 x 564 x 102	Al - Al	Drawing 3	30
GR0NH0110098	86011668 - 290022 - 290022P - 270154 - 280015 - 1E4413	8670 - 8770 - 8870 - 8970	530 x 360 x 80 oil 530 x 412 x 80 air	Al - Al	Drawing 4	31

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Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0GO0230010	26966	GOLDONI PK 103.10	360 x 372 x [*]	Co - Br	Drawing 1	32
RA0GO0230011	25068	GOLDONI PK 103.15	360 x 372 x [*]	Co - Br	Drawing 2	32
RA0GO0230021	32394	GOLDONI 32394	360 x 372 x [*]	Co - Br	Drawing 3	32
RA0GO0230013	923726	GOLDONI FOX 1204	360 x 372 x [*]	Co - Br	Drawing 4	33
RA0GO0230024	35211	GOLDONI 35211	360 x 372 x [*]	Co - Br	Drawing 5	33
RA0GO0230023	34529	GOLDONI 34529	360 x 372 x [*]	Co - Br	Drawing 6	33
RA0GO0230012	923720	GOLDONI FOX 903	360 x 373 x [*]	Co - Br	Drawing 7	33
RA0GO0230002	30928	GOLDONI PK 103.13 - 103.15	360 x 373 x [*]	Co - Br	Drawing 8	33
RA0GO0230018	0	GOLDONI D.29970	365 x 433 x [*]	Co - Br	Drawing 9	33
RA0GO0230022	0	GOLDONI 927072	365 x 433 x [*]	Co - Br	Drawing 10	34
RA0GO0230015	0	GOLDONI D.25540	365 x 433 x [*]	Co - Br	Drawing 11	34
RA0GO0230009	20101	GOLDONI VIGNETO	365 x 433 x [*]	Co - Br	Drawing 12	34
RA0GO0230019	31214	GOLDONI JD 3029	365 x 433 x [*]	Co - Br	Drawing 13	34
RA0GO0230007	21171	GOLDONI JD	365 x 433 x [*]	Co - Br	Drawing 14	34
RA0GO0230014	25343	GOLDONI PK104/19	365 x 433 x [*]	Co - Br	Drawing 15	34
RA0GO0230001	26252	GOLDONI 3050 e 3070	365 x 433 x [*]	Co - Br	Drawing 16	35



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0LO0230008	1077350148	LOMBARDINI LDW 502 VETT.	267 X 195 X [*]	Co - Br	Drawing 1	36
RA0LO0230027	1077350176	LOMBARDINI LDW 502 VETT.	267 X 195 X [*]	Co - Br	Drawing 2	36
RA0LO0230002	7350056	LOMBARDINI 0.56	380 x 385 x [*]	Co - Br	Drawing 3	36
RA0LO0140045	7350288	LOMBARDINI LDW 1204	388 x 362 x [*]	Al - PI	Drawing 4	37
RA0LO0230030	0	LOMBARDINI 1204	388 x 368 x [*]	Co - Br	Drawing 5	37
RA0LO0230031	7350096	LOMBARDINI 096 LDW 903 D.C.	388 x 372 x [*]	Co - Br	Drawing 6	37
RA0LO0230033	1157350093	LOMBARDINI LDW 1204 D.C.	388 x 372 x [*]	Co - Br	Drawing 7	37
RA0LO0230034	0	LOMBARDINI 2004T	414 x 372 x [*]	Co - Br	Drawing 8	37
RA0LO0230046	115007350311	LOMBARDINI 289	450 x 362 x [*]	Co - Br	Drawing 9	37
RA0LO0230035	7350146	LOMBARDINI 146	450 x 372 x [*]	Co - Br	Drawing 10	38
RA0LO0230037	1157350257	LOMBARDINI 257	450 x 372 x [*]	Co - Br	Drawing 11	38
RA0LO0230038	7350174	LOMBARDINI 2004 T	450 x 372 x [*]	Co - Br	Drawing 12	38

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Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0LO0230006	0	LOMBARDINI 903 SINGLE CIRCUIT	350 x 345 x [*]	Co - Br	Drawing 13	38
RA0LO0230021	7350147	LOMBARDINI 147 - 2000 CHT	372 x 455 x [*]	Co - Br	Drawing 14	38
RA0LO0230039	1067350262	LOMBARDINI 262 ex - 194 TRIPLE CIRCUIT	372 x 455 x [*]	Co - Br	Drawing 15	38
RA0LO0230040	1157350263	LOMBARDINI 263 TRIPLE CIRCUIT	372 x 455 x [*]	Co - Br	Drawing 16	39
RA0LO0230032	7350175	LOMBARDINI 175	372 x 445 x [*]	Co - Br	Drawing 17	39
RA0LO0230042	1147350264	LOMBARDINI 183 TRIPLE CIRCUIT	372 x 445 x [*]	Co - Br	Drawing 18	39
RA0LO0230011	0	LOMBARDINI 183 TROPICAL	372 x 464 x [*]	Co - Br	Drawing 19	39
RA0LO0230005	0	LOMBARDINI LDW 903 FOX	380 x 385 x [*]	Co - Br	Drawing 20	39
RA0LO0230007	0	LOMBARDINI LDW 903 FOX	380 x 385 x [*]	Co - Br	Drawing 21	39
RA0LO0140044	106007350313	LOMBARDINI 290	388 x 362 x [*]	Al - Pl	Drawing 22	40
RA0LO0230024	7350169	LOMBARDINI LDW 903	388 x 371 x [*]	Co - Br	Drawing 23	40
RA0LO0230036	7350192	LOMBARDINI 192 LDW 903 TRIPLE CIRCUIT	388 x 372 x [*]	Co - Br	Drawing 24	40
RA0LO0230013	7350128	LOMBARDINI LDW 903	388 x 373 x [*]	Co - Br	Drawing 25	40
RA0LO0230043	0105.7350.261.00.0	LOMBARDINI 193 LDW 1503 TRIPLE CIRCUIT	388 x 371 x [*]	Co - Br	Drawing 26	40
RA0LO0230047	0	LOMBARDINI ex - 193 RINF. TRIPLE CIRCUIT	388 x 372 x [*]	Co - Br	Drawing 27	40
RA0LO0230012	0	LOMBARDINI LDW 1204 SINGLE CIRCUIT	388 x 373 x [*]	Co - Br	Drawing 28	41
RA0LO0230048	0	LOMBARDINI LDW 1204 S SINGLE CIRCUIT	388 x 373 x [*]	Co - Br	Drawing 29	41
RA0LO0230049	0	LOMBARDINI 193 - 3TMF TRIPLE CIRCUIT	388 x 371 x [*]	Co - Br	Drawing 30	41
RA0LO0230041	G1574	LOMBARDINI 183 XL TRIPLE CIRCUIT	472 x 445 x [*]	Co - Br	Drawing 31	41

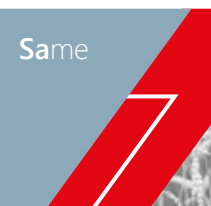


Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RA0RE0110083	7700065582	616RX - 616RZ - 617 - 656 - 657 - 696RZ - 696RX - 697	635 x 518 x 102	All - All	Drawing 1	42



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RASLH0230020	1299874/50	SAME NUOVO TRATTORINO	345 x 394 x [*]	Co - Br	Drawing 1	43
RASLH0230040	1368284/40	SAME NUOVO TRATTORINO T.C.	345 x 394 x [*]	Co - Br	Drawing 2	43
RASLH0230021	1283714/10	SAME 2204	375 x 386 x [*]	Co - Br	Drawing 3	43

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Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RASLH0230017	1213654/20	SAME 40S "GALILEO"	622 x 550 x [*]	Co - Br	Drawing 4	44
RASLH0230006	1086193/00	SAME RADIATOR S + L + H 10N	375 x 432 x [*]	Co - Br	Drawing 5	44
RASLH0230004	1042693	SAME RADIATOR S + L + H 15Y	376 x 432 x [*]	Co - Br	Drawing 6	44
RASLH0230036	1317693/20	SAME 3 - 4 CYLINDERS	337 x 465 x [*]	Co - Br	Drawing 7	44
RASLH0230041	1384313	SAME FRUTTETO 3 TRIPLE FLOW	372 x 465 x [*]	Co - Br	Drawing 8	44
RASLH0230034	1308473/20	SAME FRUTTETO 3	375 x 465 x [*]	Co - Br	Drawing 9	44
RASLH0230008	1061053/80	SAME 008 - D11S	375,5 x 480 x [*]	Co - Br	Drawing 10	45
RASLH0230032	1384313/30	SAME TRIPLE FLOW FRUTTETO 3	372 x 483 x [*]	Co - Br	Drawing 11	45
RASLH0230007	1061053/40	SAME 007 - D11S - RAD. 6 ROWS	384 x 486 x [*]	Co - Br	Drawing 12	45
RASLH0230009	1094292	SAME 009 - 30S	399 x 600 x [*]	Co - Br	Drawing 13	45
RASLH0230023	1127792/40	SAME 35S	485 x 600 x [*]	Co - Br	Drawing 14	45
RASLH0230005	71372	SAME 005	485 x 600 x [*]	Co - Br	Drawing 15	45
RASLH0230002	762582	SAME 002	485 x 600 x [*]	Co - Br	Drawing 16	46
RASLH0230024	0	SAME 002/005/010 - RAD. H ₂ O	485 x 600 x [*]	Co - Br	Drawing 17	46
RASLH0230011	1160212/30	SAME 011 -31S	424 x 580 x [*]	Co - Br	Drawing 18	46
RASLH0230015	87241602	SAME 015 GE - 100 Cv	485 x 590 x [*]	Co - Br	Drawing 19	46
RASLH0230001	1134302/10	SAME 001	485 x 600 [*]	Co - Br	Drawing 20	46
RASLH0230037	1371434/01	SAME 037	422 x 605 x [*]	Co - Br	Drawing 21	46
RASLH0230039	1371474	SAME 039	501 x 605 x [*]	Co - Br	Drawing 22	47
RASLH0230012	1197642/20	SAME 40S 5TEX - RAD. H ₂ O	622 X 550 X [*]	Co - Br	Drawing 23	47
RASLH0230035	1197642/30	SAME 40S TMG8 5 ROWS - RAD. H ₂ O	622 x 538 x [*]	Co - Br	Drawing 24	47
RASLH0230033	1313794/20	SAME 40S 5TMG8 - RAD. S + L + H	622 x 538 x [*]	Co - Br	Drawing 25	47
RASLH0230016	87242602	SAME 1000,6 WTIS - 175 Cv	648 x 577 x [*]	Co - Br	Drawing 26	47
RASLH0230013	1164312/40	SAME 40S/A	485 x 670 x [*]	Co - Br	Drawing 27	47



Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
ROOVA0110112			555 x 435 x 45	Al - Al	Drawing 1	48

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Product Code	O.E.M.	Model	Dimension	Material	Drawing	Page
RO0ZE0110016			358 x 192 x 50	Al - Al	Drawing 1	49
RO0ZE0110076			358 x 215 x 50	Al - Al	Drawing 2	49

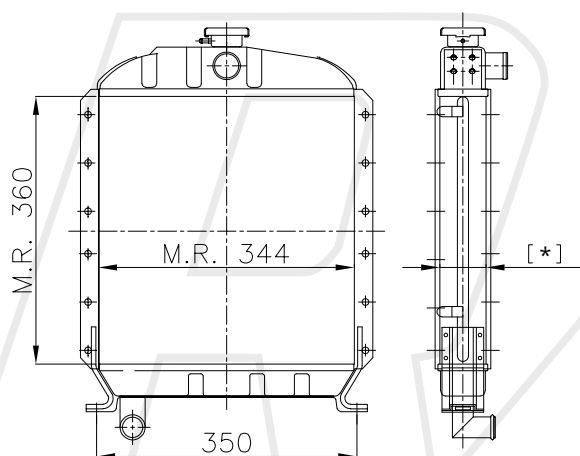
* The shown dimensions are **indicative** because they can vary according to the construction system.

DRAWINGS MODELS



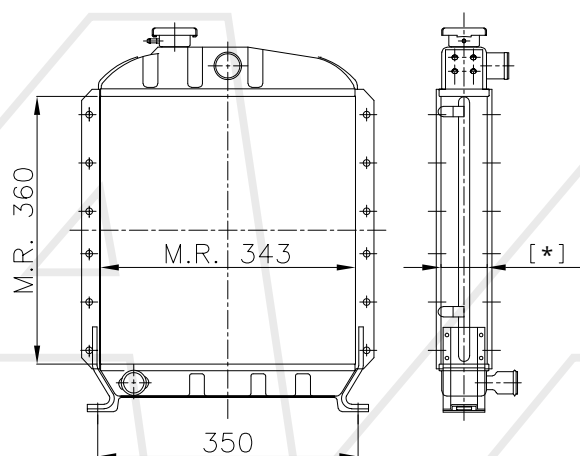
FIATAGRI MODELS

Drawing 1



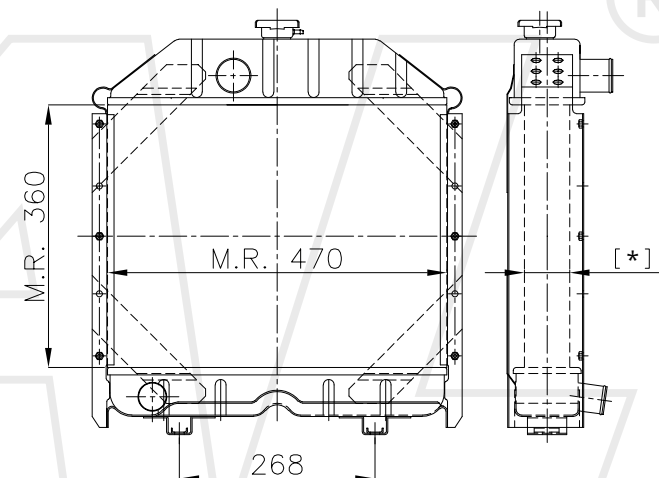
Cod. RA0FA0230008

Drawing 2



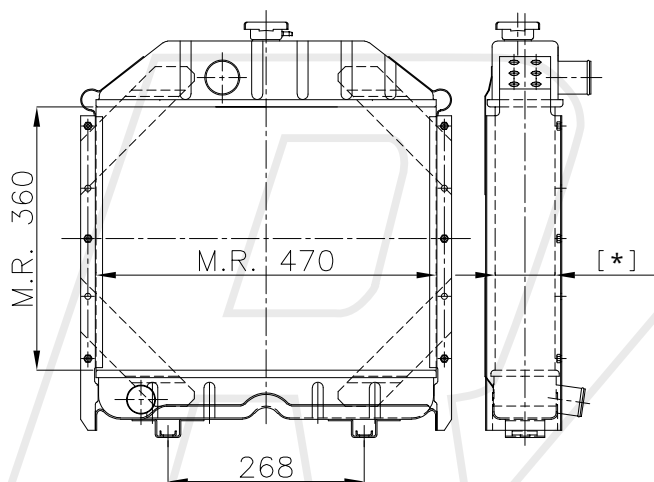
Cod. RA0FA0230015

Drawing 3



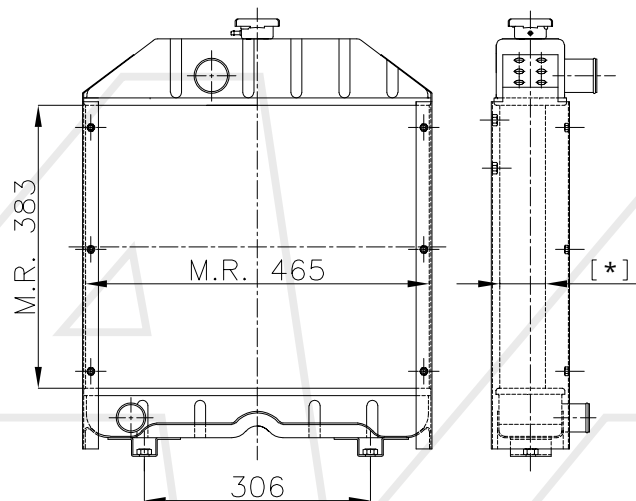
Cod. RA0FA0230022

Drawing 4



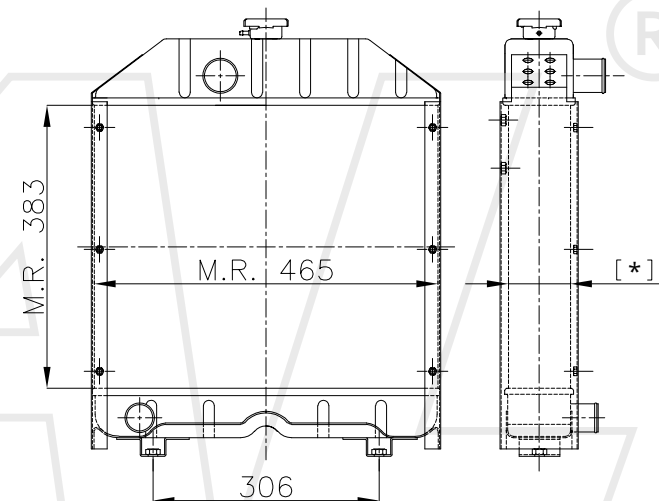
Cod. RA0FA0230023

Drawing 5



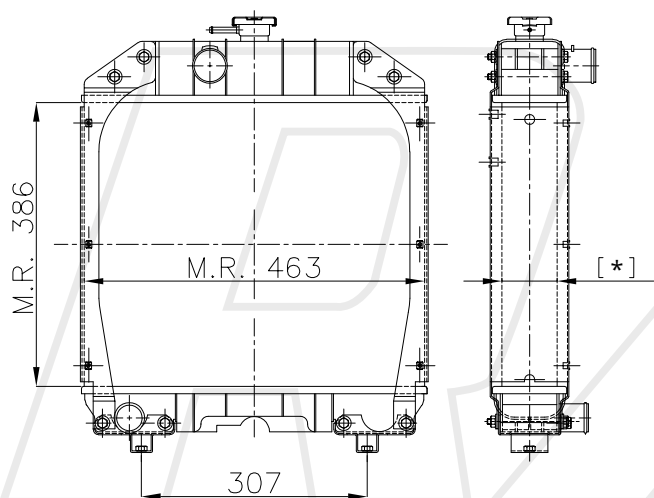
Cod. RA0FA0230031

Drawing 6



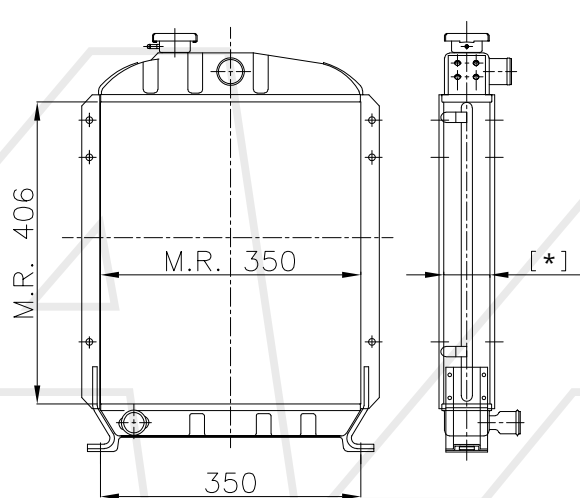
Cod. RA0FA0230036

Drawing 7



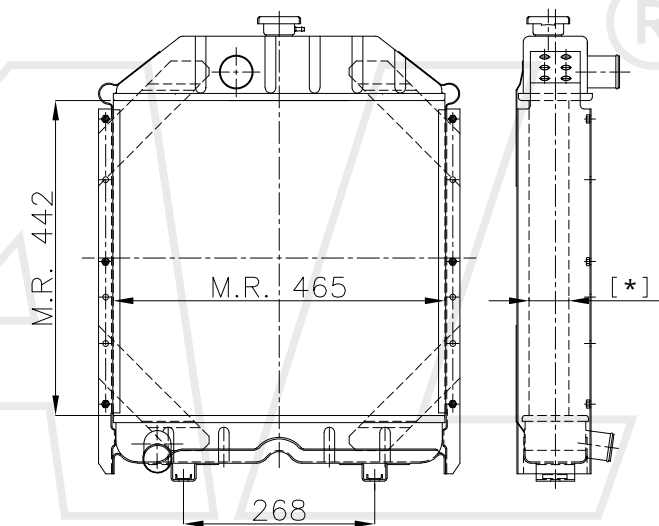
Cod. RA0FA0140031

Drawing 8



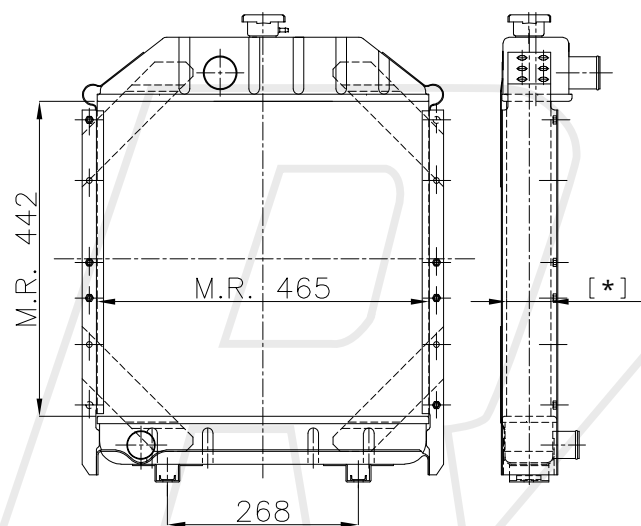
Cod. RA0FA0230003

Drawing 9



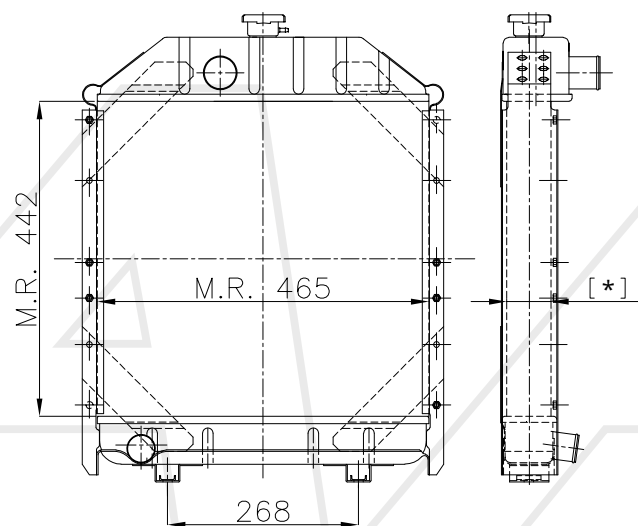
Cod. RA0FA0230030

Drawing 10



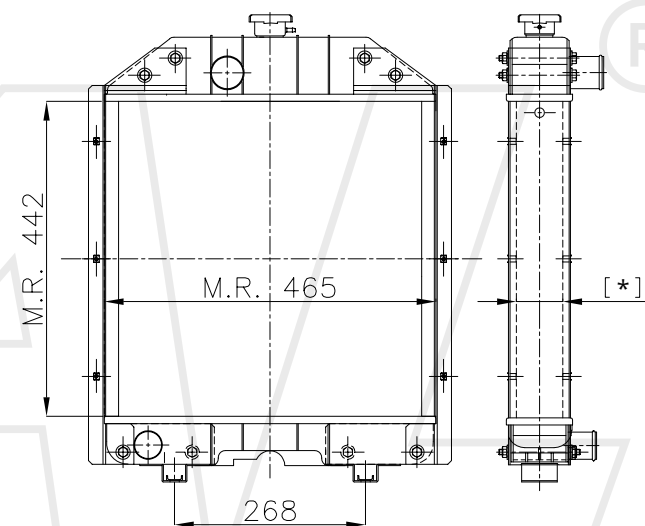
Cod. RA0FA0230006

Drawing 11



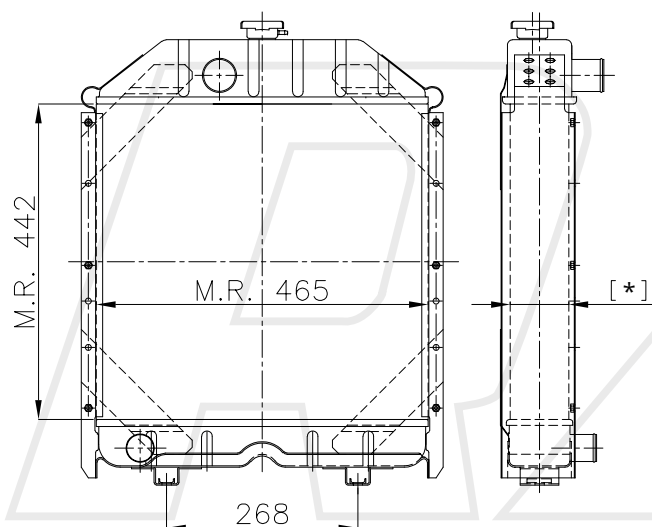
Cod. RA0FA0230019

Drawing 12



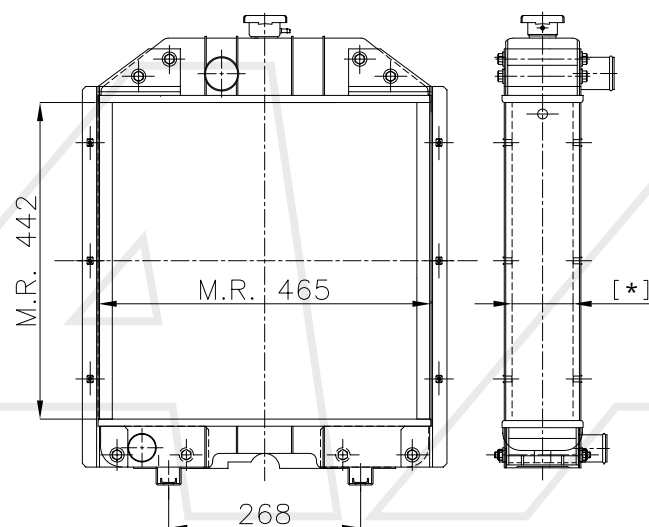
Cod. RA0FA0140006

Drawing 13



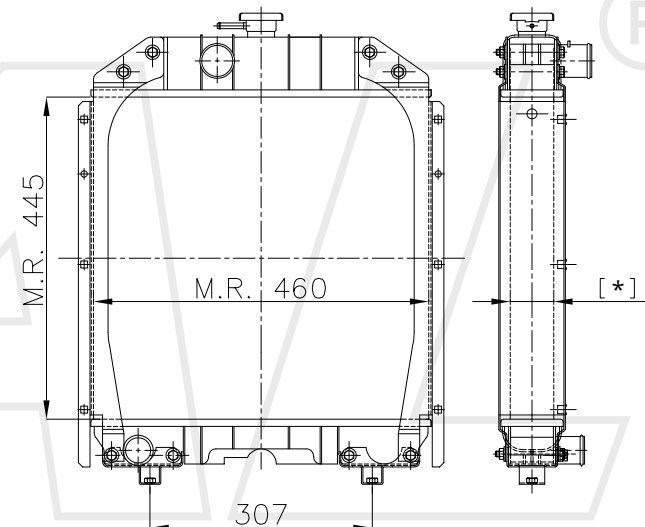
Cod. RA0FA0230012

Drawing 14



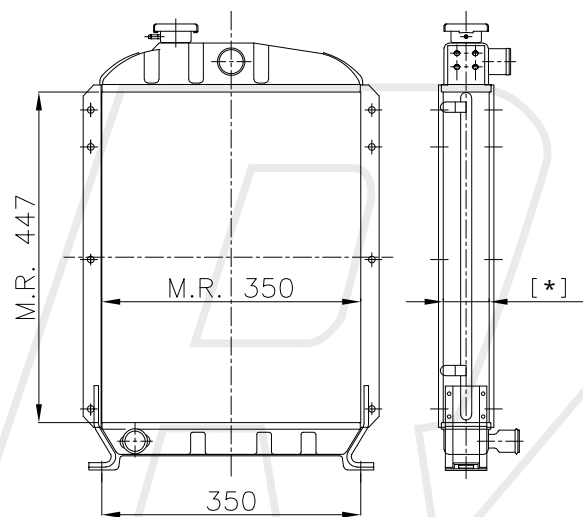
Cod. RA0FA0140012

Drawing 15



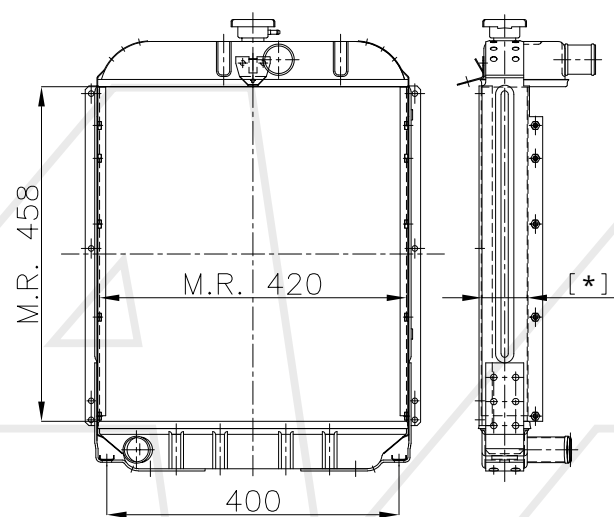
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Drawing 16



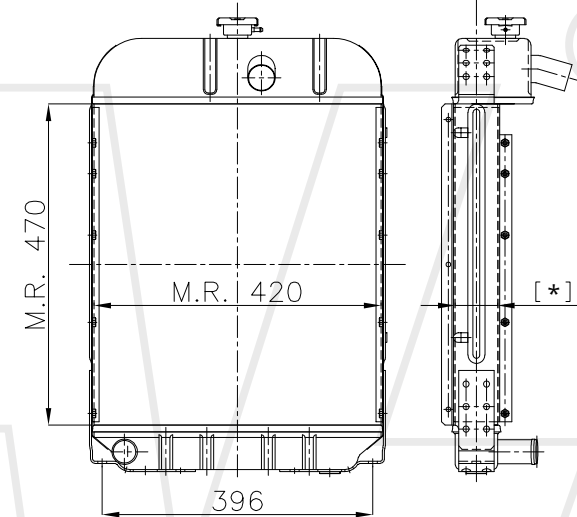
Cod. RA0FA0230001

Drawing 17



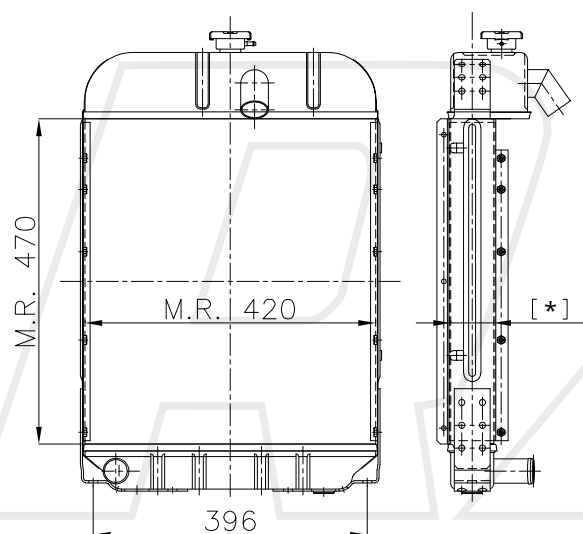
Cod. RA0FA0230020

Drawing 18



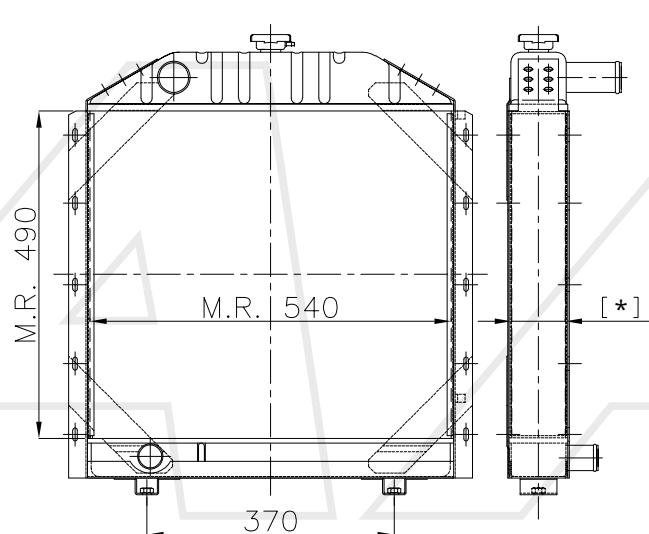
Cod. RA0FA0230005

Drawing 19



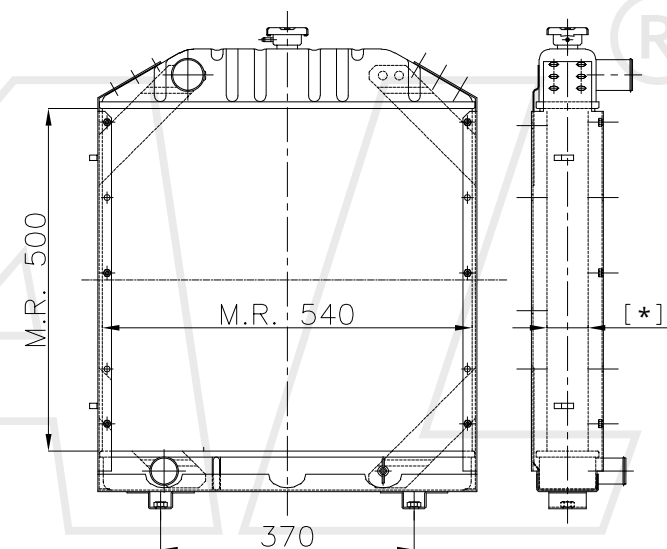
Cod. RA0FA0230016

Drawing 20



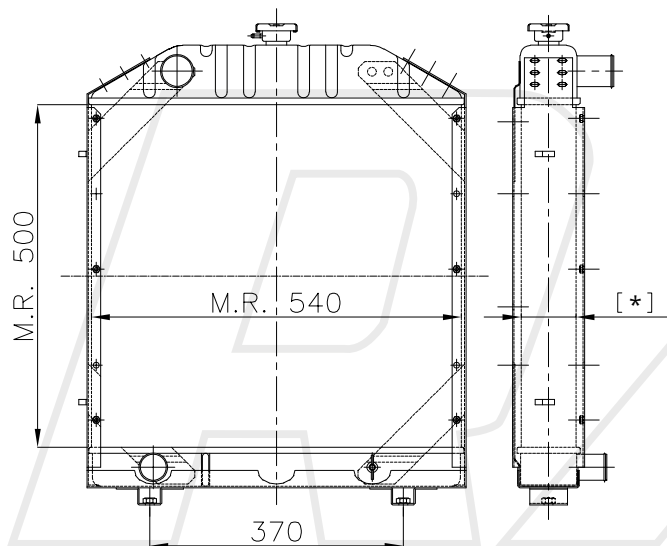
Cod. RA0FA0230024

Drawing 21



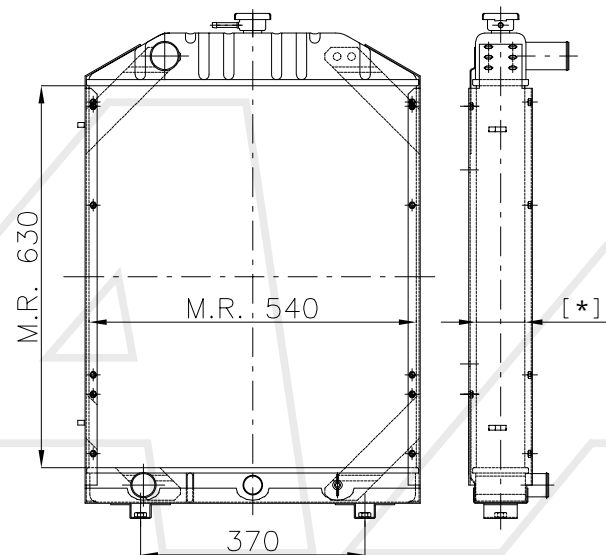
Cod. RA0FA0230025

Drawing 22



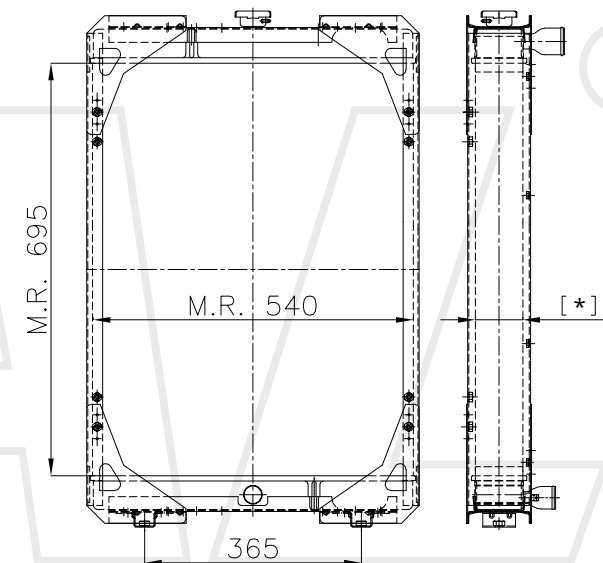
Cod. RA0FA0230026

Drawing 23



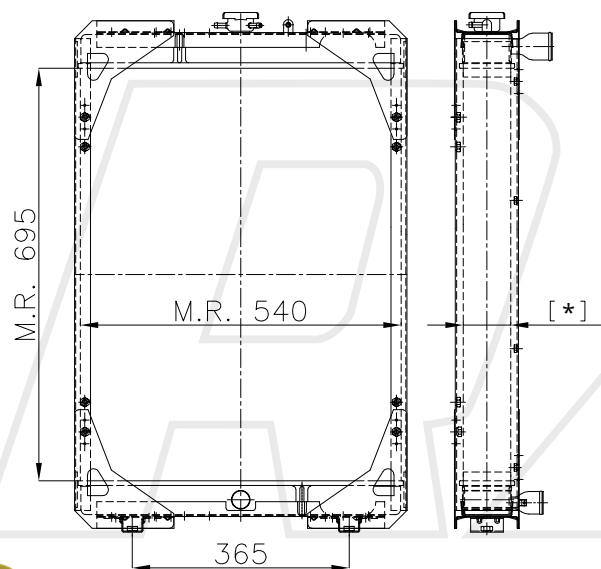
Cod. RA0FA0230027

Drawing 24



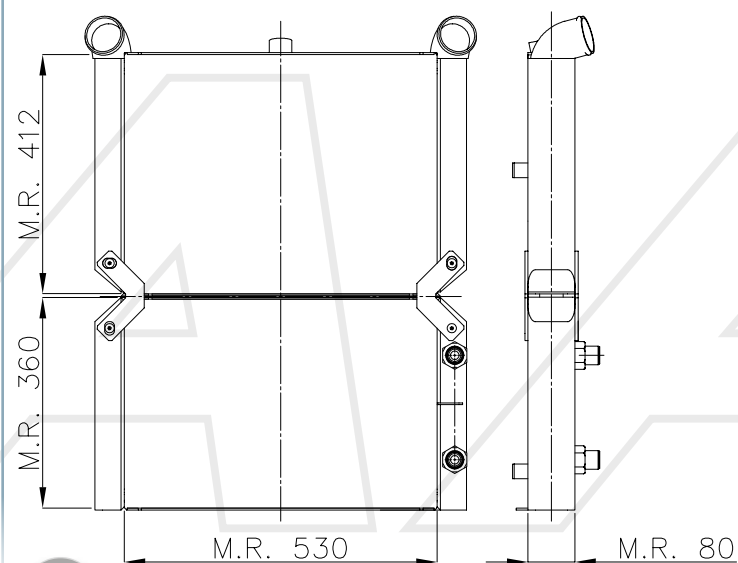
Cod. RA0FA0230032

Drawing 25



Cod. RA0FA0230035

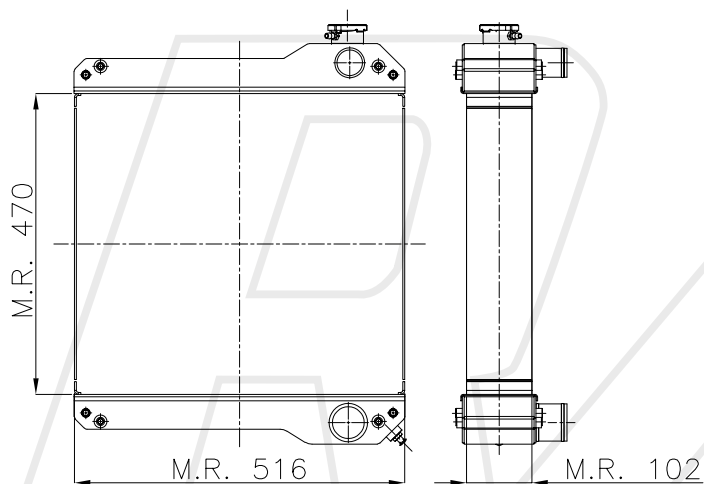
Drawing 26



Cod. GR0NH0110098

NEW HOLLAND MODELS

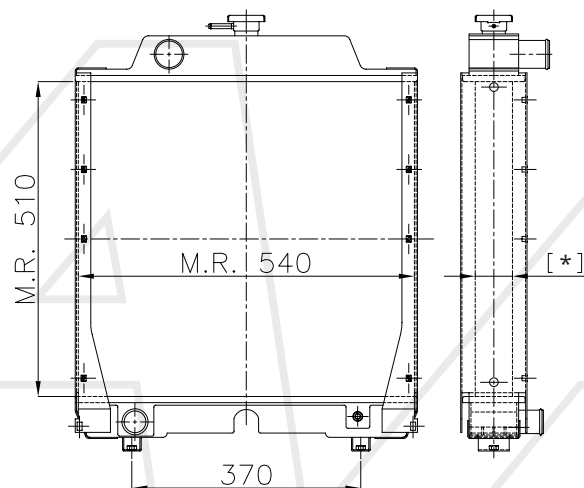
Drawing 1



Al Al

Cod. RA0NH0110094

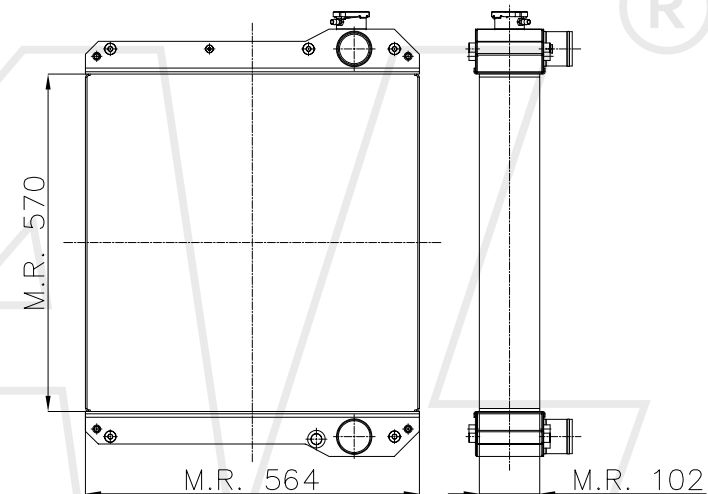
Drawing 2



Co Br

Cod. RA0NH0230033

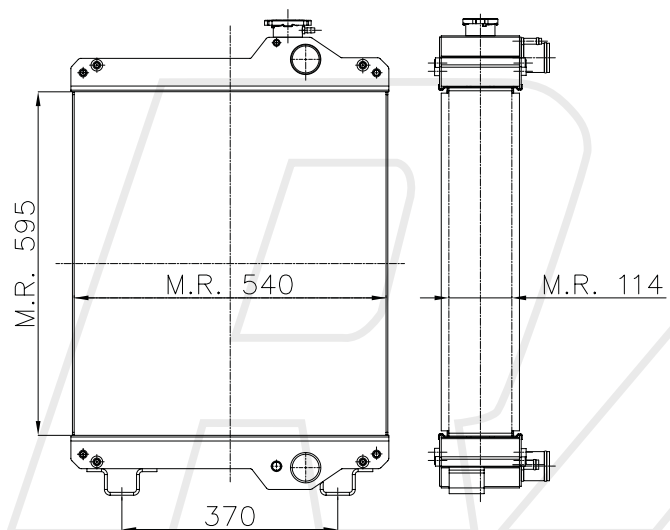
Drawing 3



Al Al

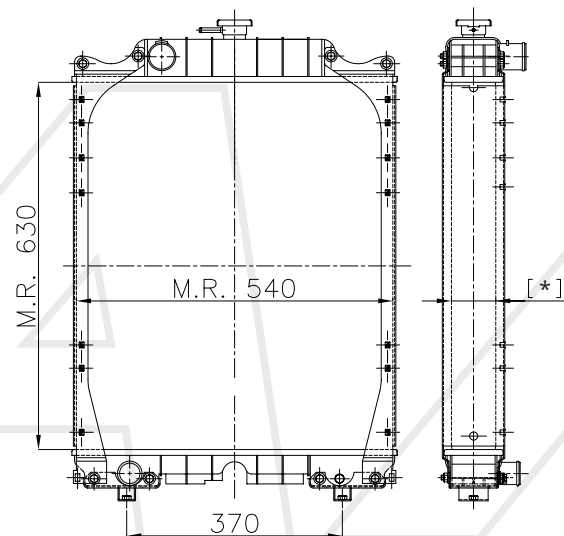
Cod. RA0NH0110095

Drawing 4



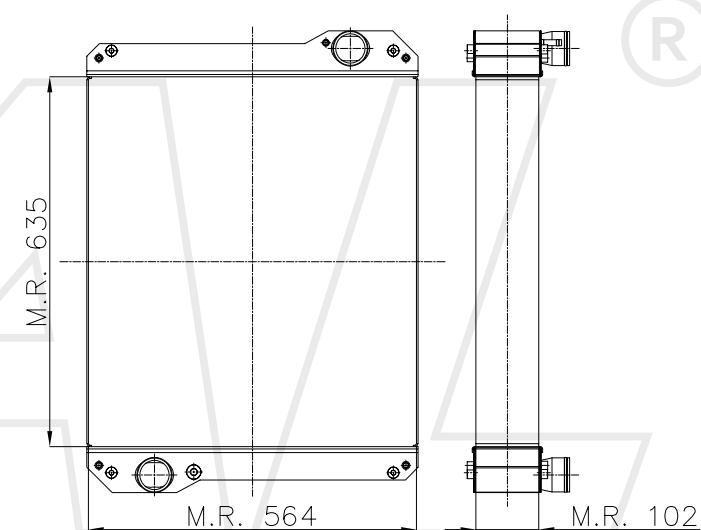
Cod. RA0NH0110184

Drawing 5



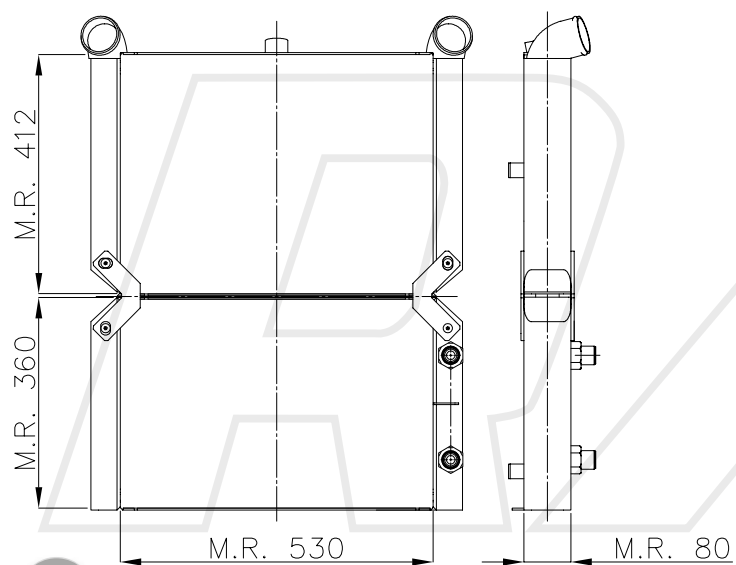
Cod. RA0NH0230034

Drawing 6



Cod. RA0NH0110185

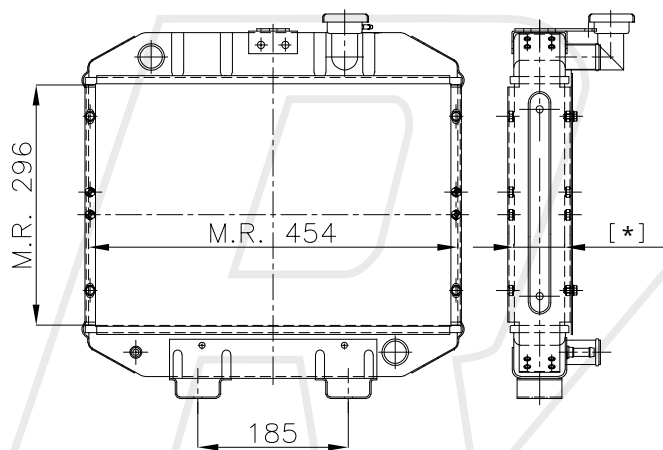
Drawing 7



Cod. GR0NH0110098

CARRARO MODELS

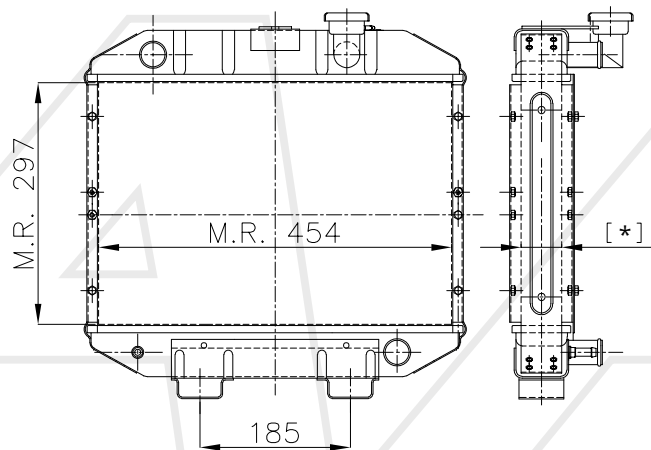
Drawing 1



Co Br

Cod. RA0CA0230014

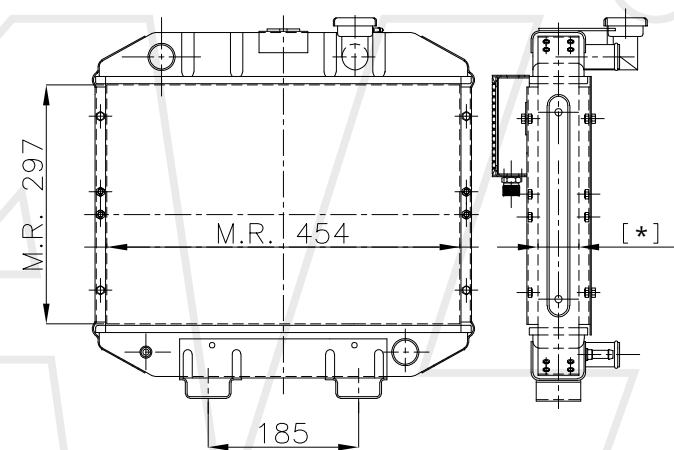
Drawing 2



Co Br

Cod. RA0CA0230011

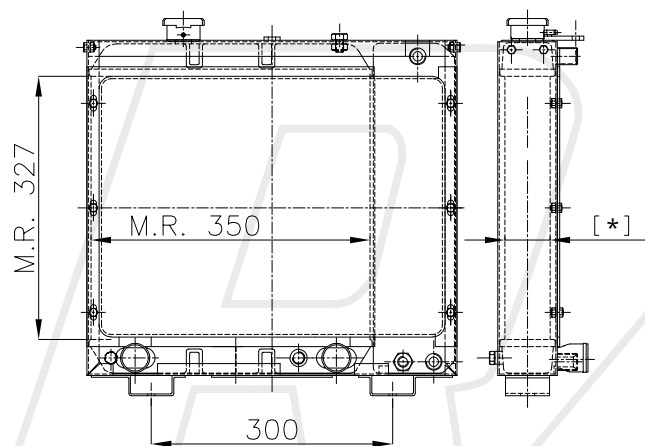
Drawing 3



Co Br

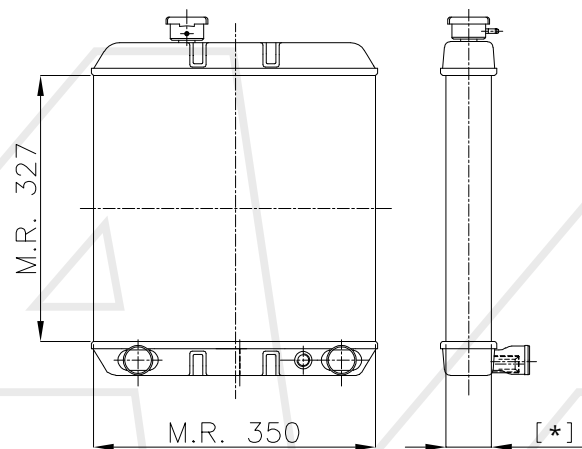
Cod. GR0CA0230011

Drawing 4



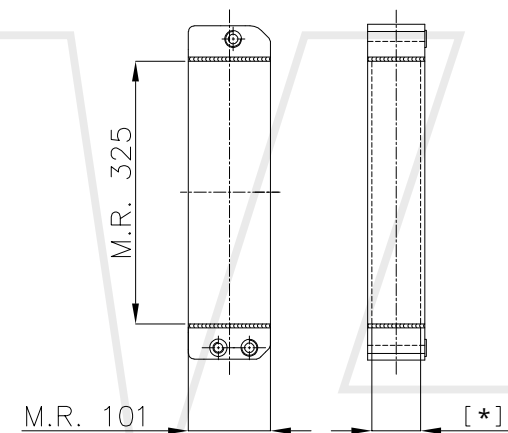
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Drawing 5



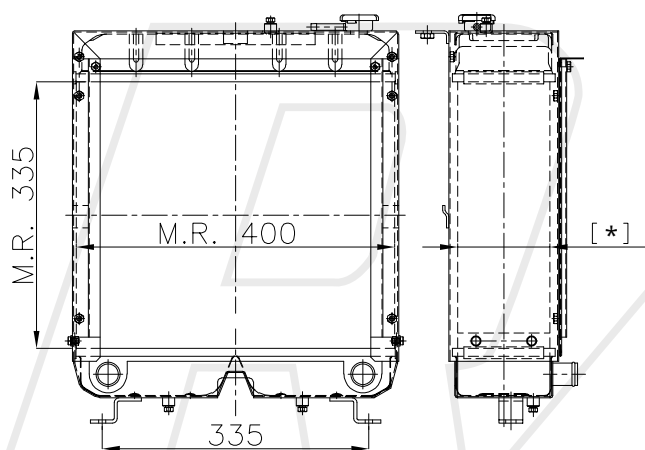
Cod. RA0CA0230018

Drawing 6



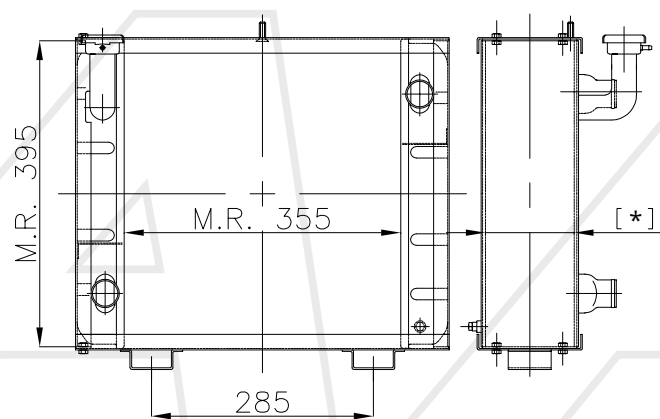
Cod. RO0CA0110018

Drawing 7



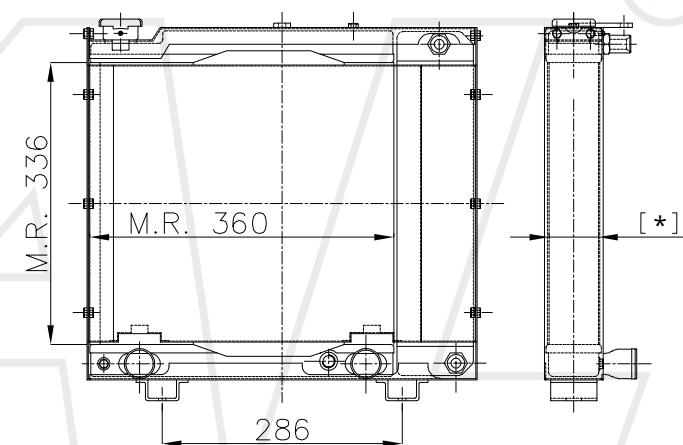
Cod. RA0CA0230028

Drawing 8



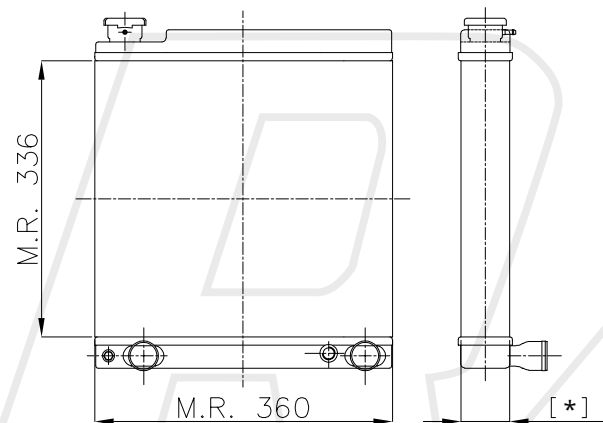
Cod. RA0CA0230001

Drawing 9



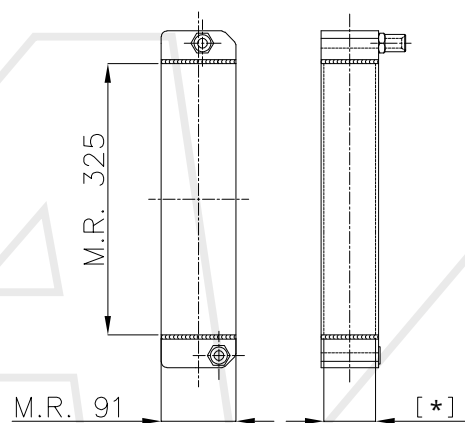
Cod. GR0CA0230002

Drawing 10



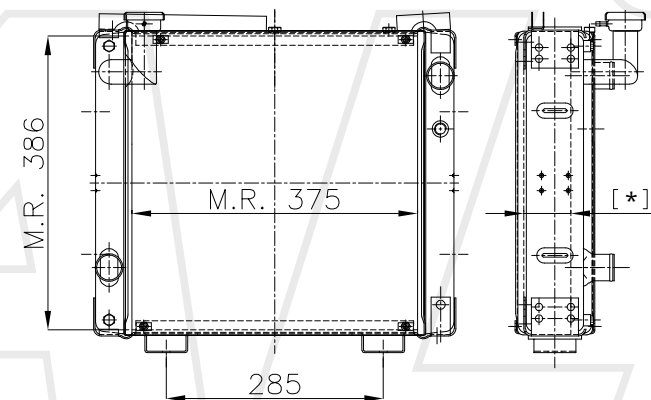
Cod. RA0CA0230002

Drawing 11



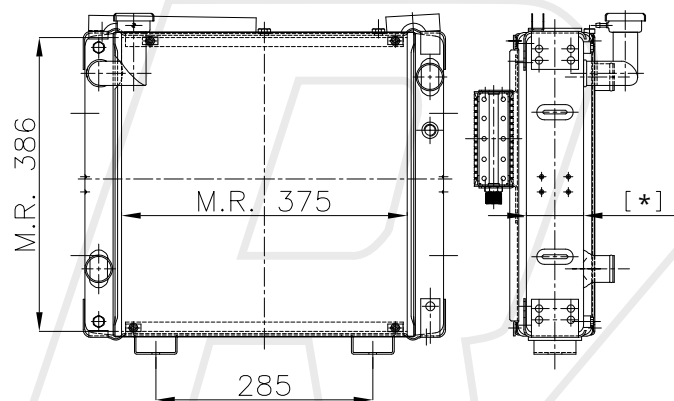
Cod. RO0CA0110002

Drawing 12



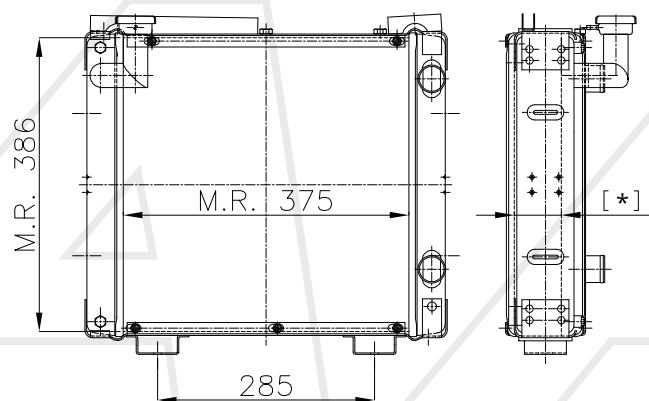
Cod. RA0CA0230006

Drawing 13



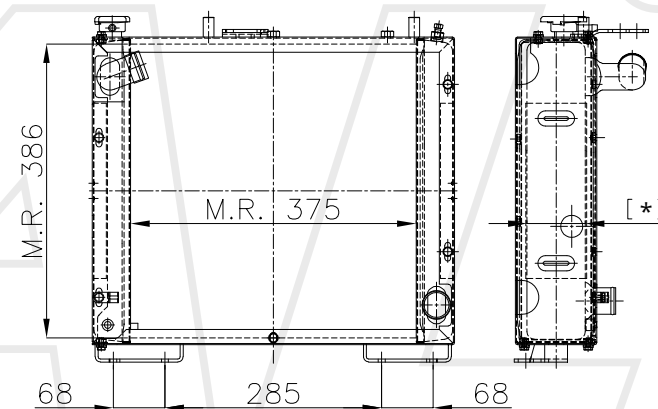
Cod. GR0CA0230006

Drawing 14



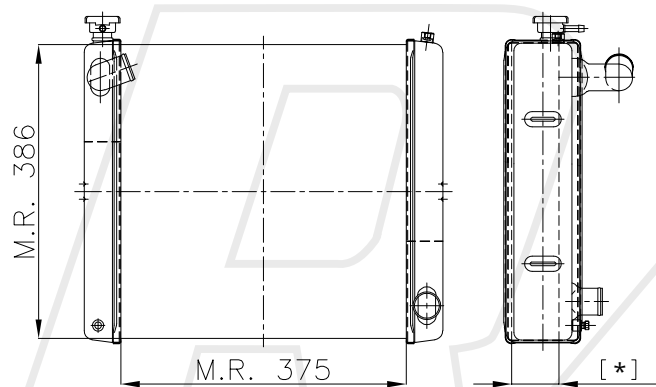
Cod. RA0CA0230003

Drawing 15



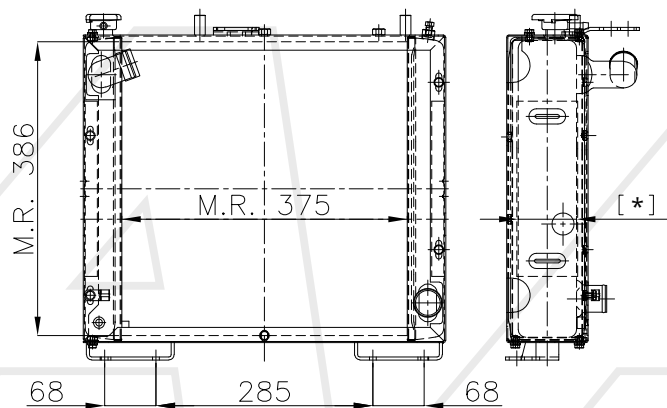
Cod. RA0CA0230025

Drawing 16



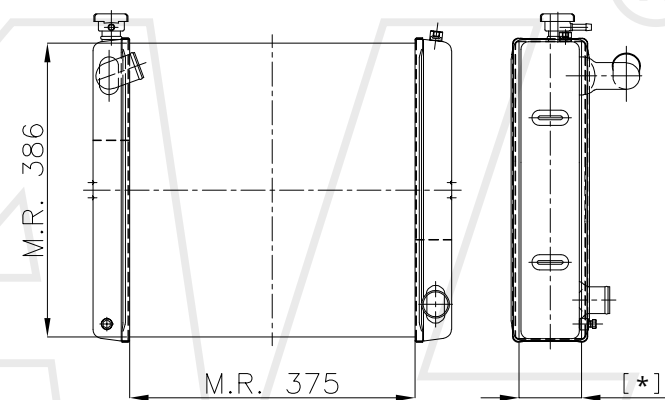
Cod. RA0CA0230050

Drawing 17



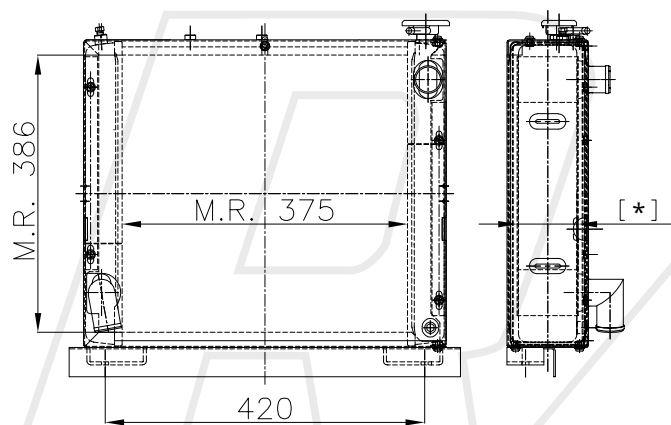
Cod. RA0CA0230023

Drawing 18



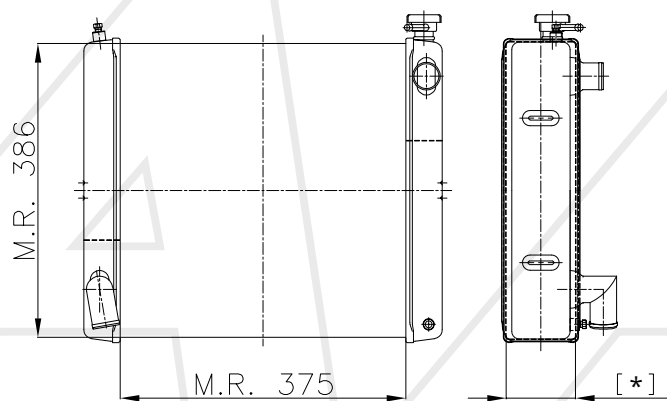
Cod. RA0CA0230051

Drawing 19



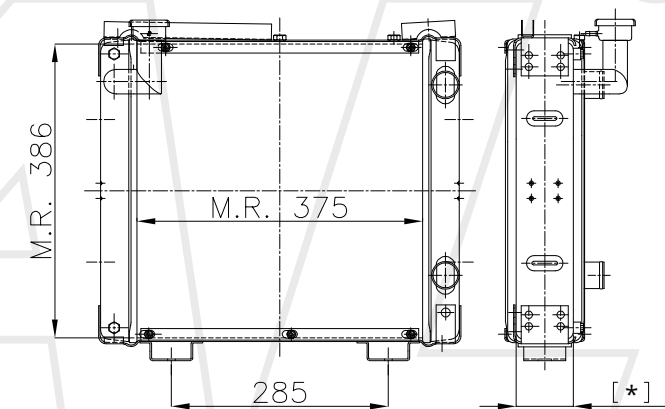
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Drawing 20



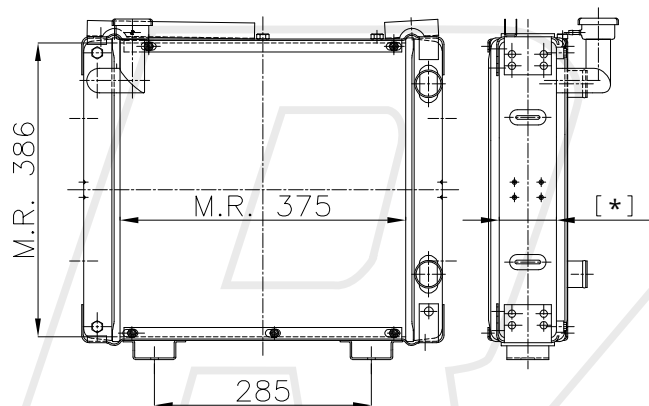
Cod. RA0CA0230033

Drawing 21



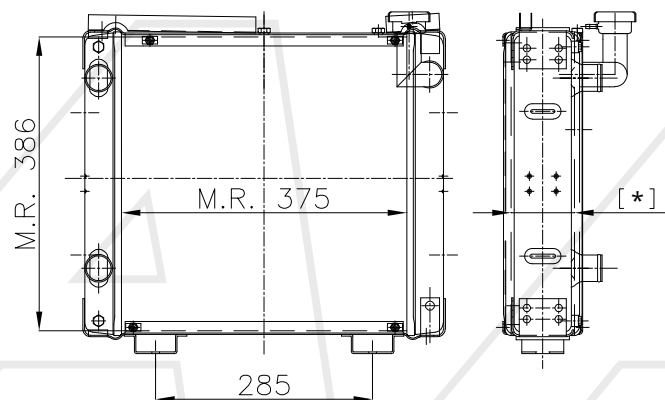
Cod. RA0CA0230017

Drawing 22



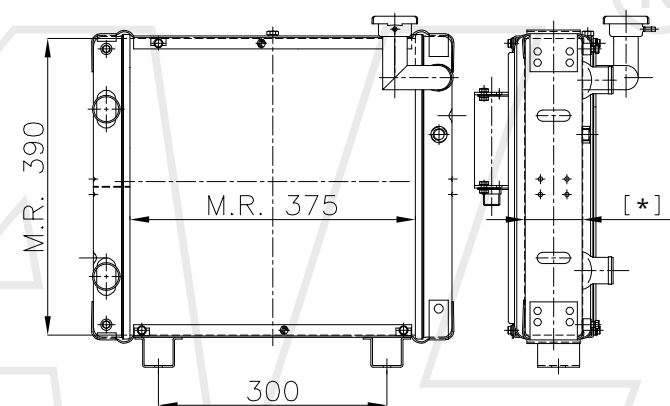
Cod. RA0CA0230004

Drawing 23



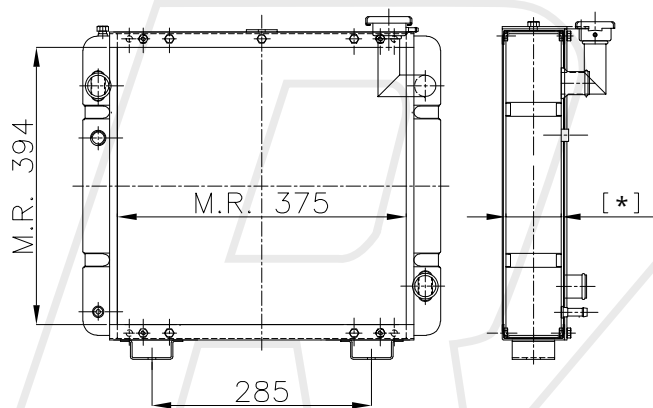
Cod. RA0CA0230013

Drawing 24



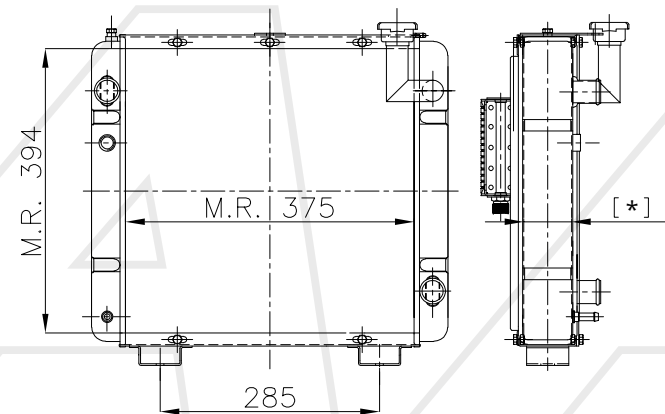
Cod. RA0CA0230022

Drawing 25



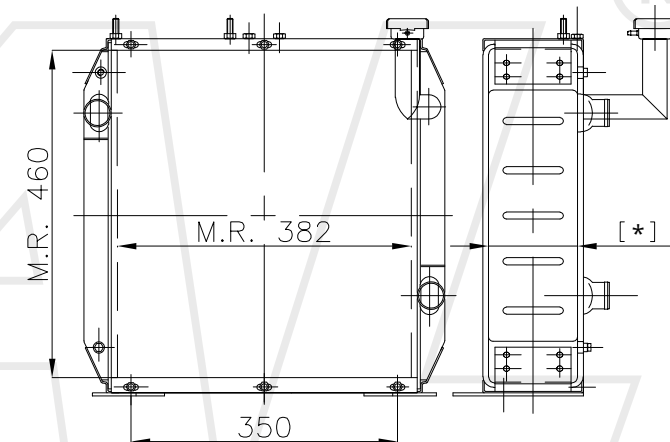
Cod. RA0CA0230015

Drawing 26



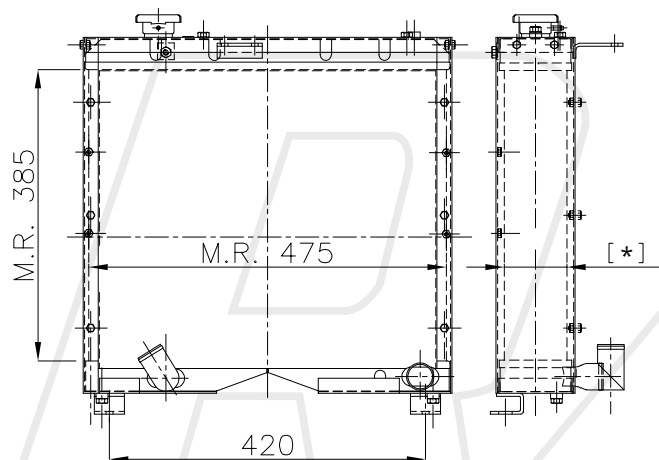
Cod. GR0CA0230015

Drawing 27



Cod. RA0CA0230007

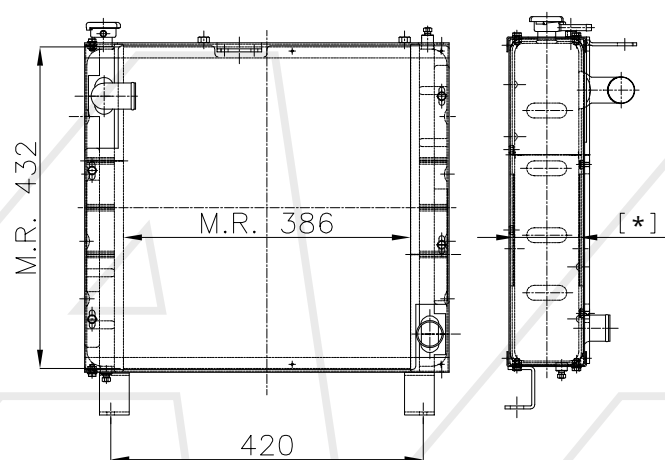
Drawing 28



Co Br

Cod. RA0CA0230019

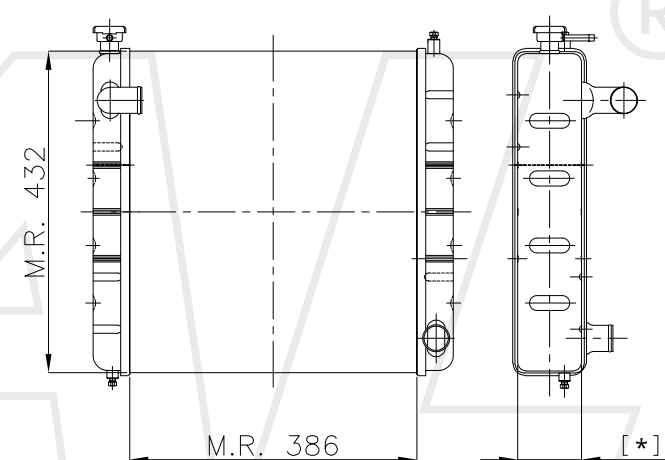
Drawing 29



Co Br

Cod. RA0CA0230020

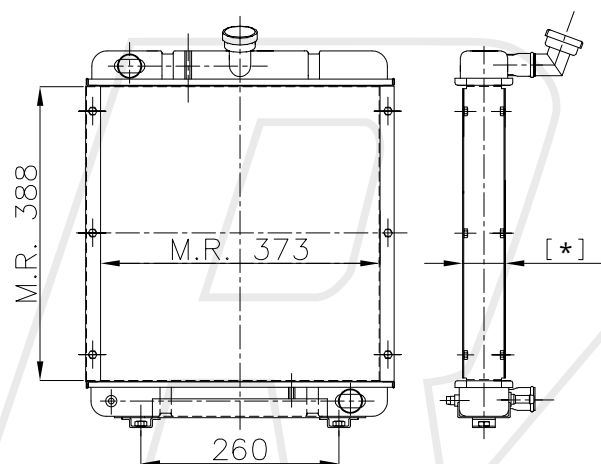
Drawing 30



Co Br

Cod. RA0CA0230052

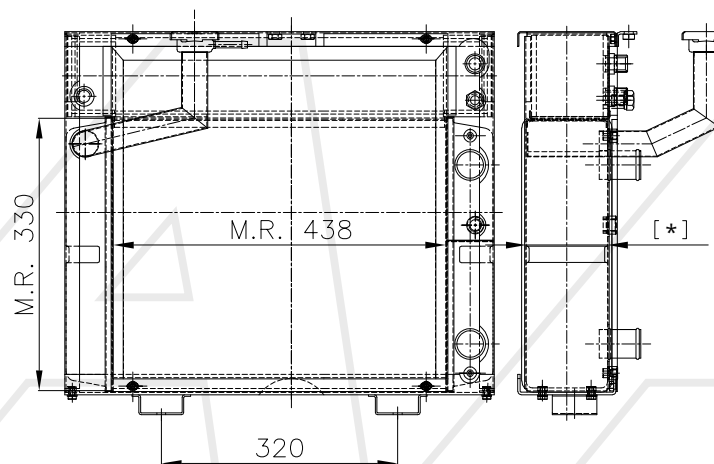
Drawing 31



Co Br

Cod. RA0CA0230012

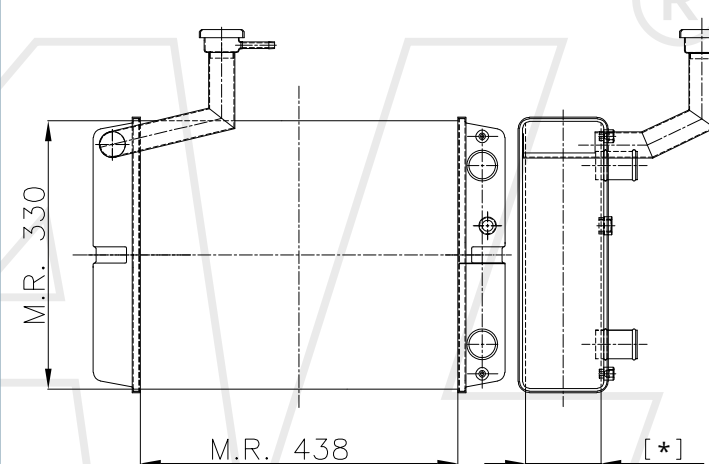
Drawing 32



Co Br

Cod. GR0CA0230027

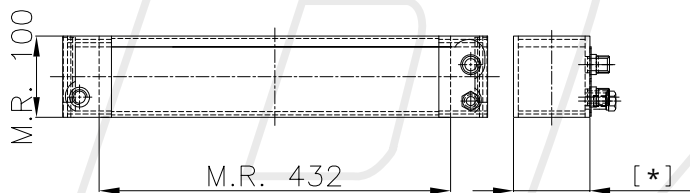
Drawing 33



Co Br

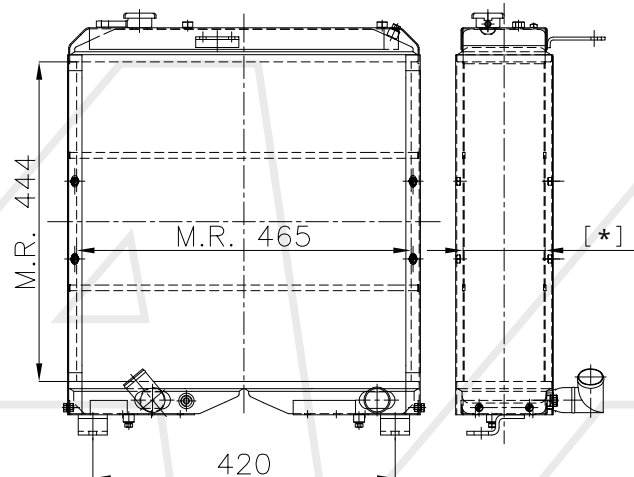
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Drawing 34



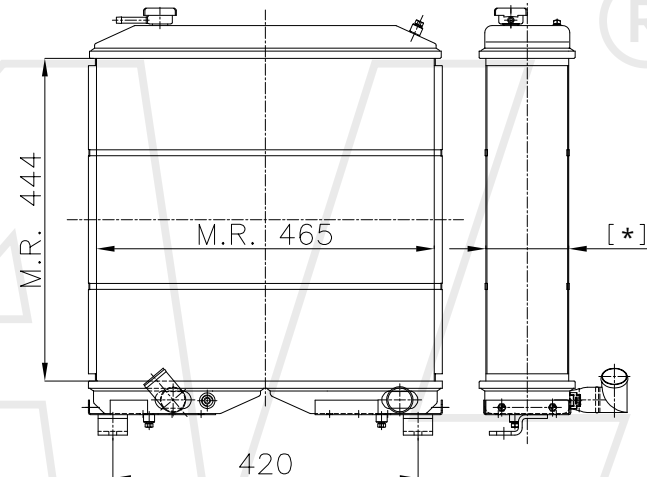
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Drawing 35



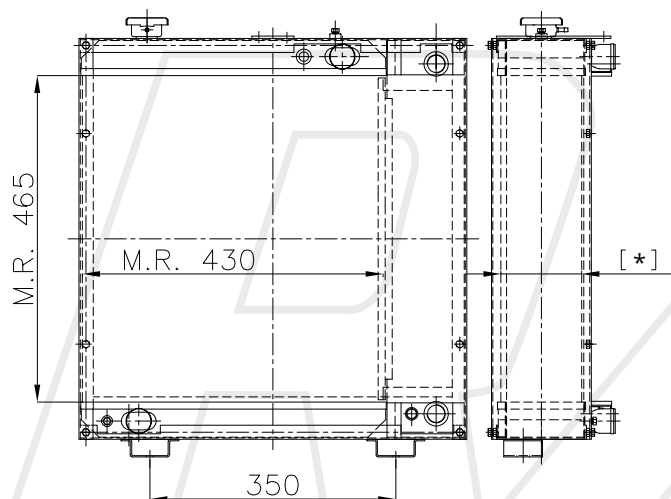
Cod. RA0CA0230032

Drawing 36



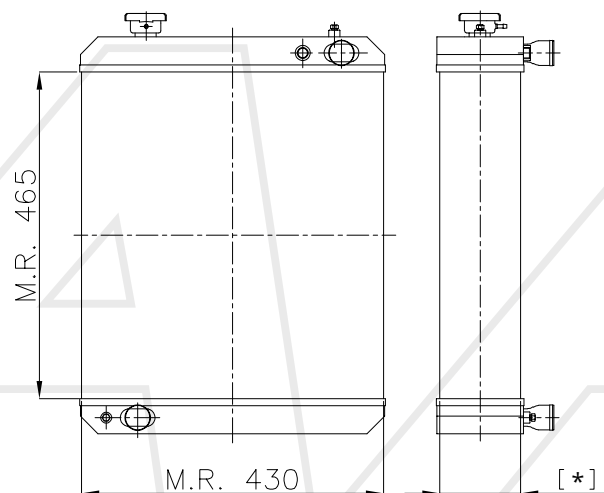
Cod. RA0CA0230055

Drawing 37



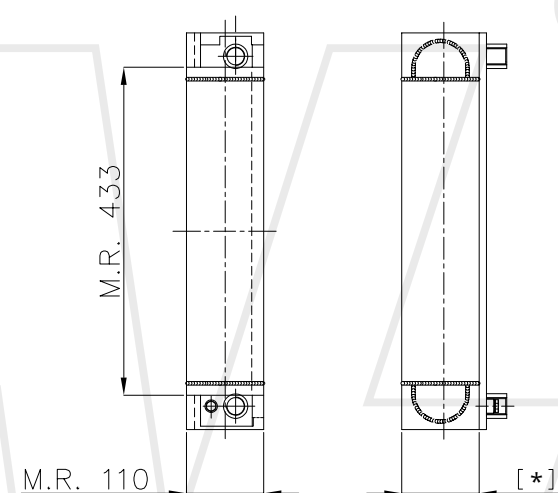
Cod. GR0CA0230021

Drawing 38



Cod. RA0CA0230021

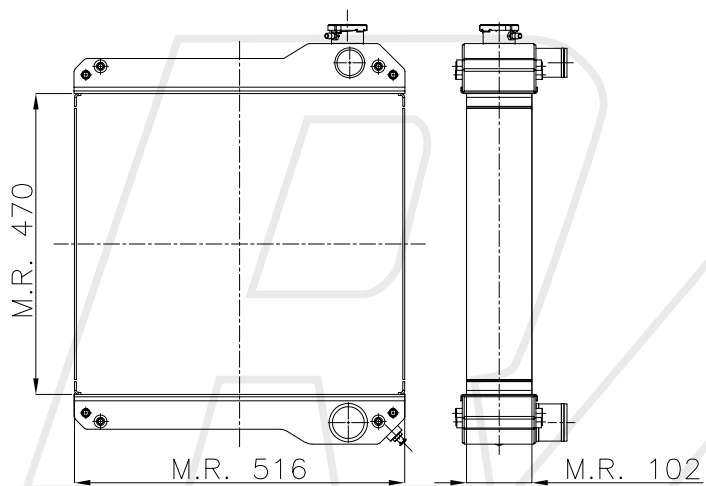
Drawing 39



Cod. RO0CA0230021

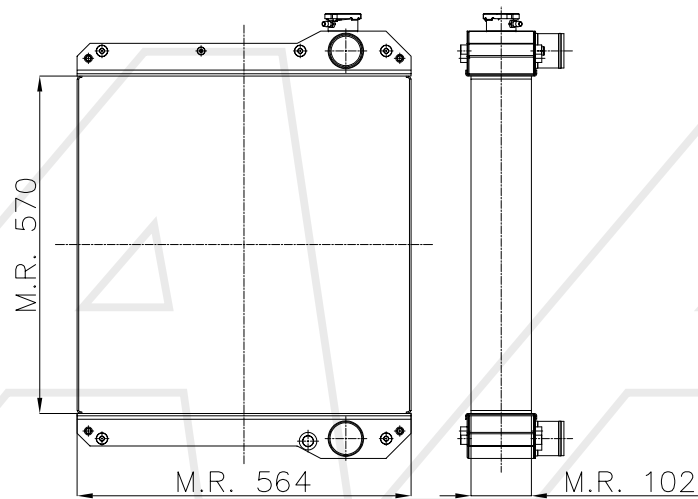
CASE IH MODELS

Drawing 1



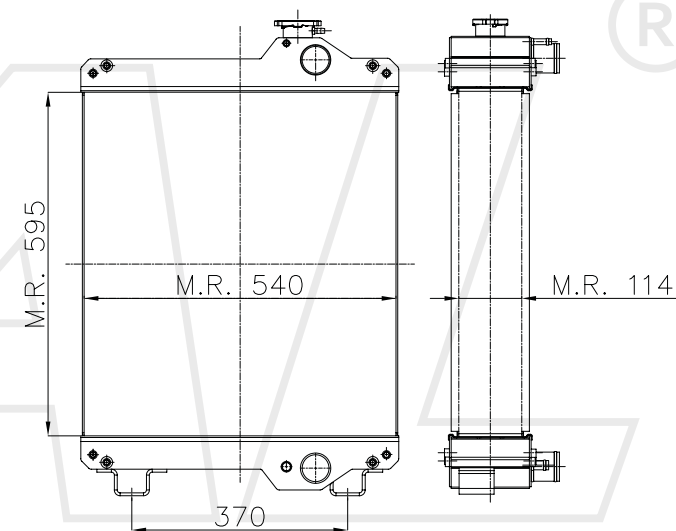
Cod. RA0NH0110094

Drawing 2



Cod. RA0NH0110095

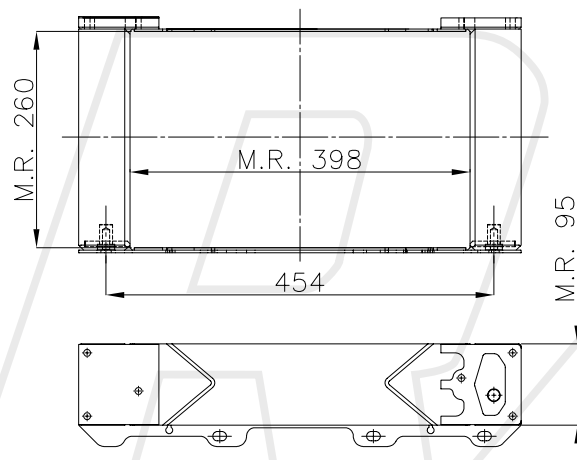
Drawing 3



Cod. RA0NH0110184

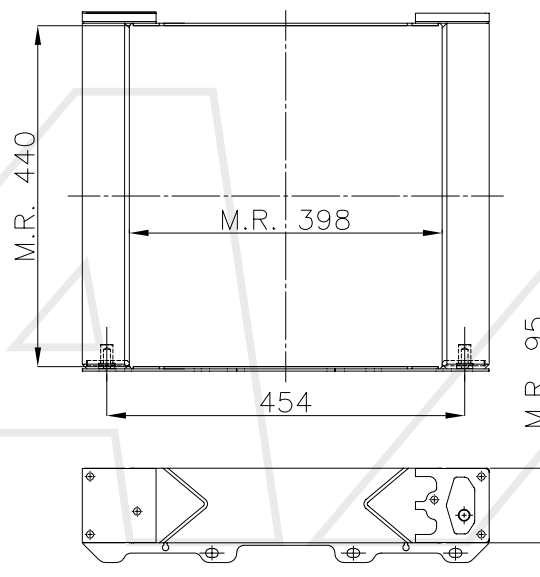
DEUTZ MODELS

Drawing 1



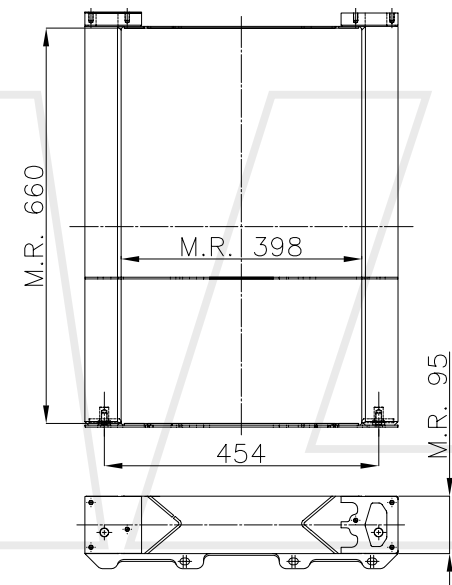
Cod. RA0DE0110002

Drawing 2



Cod. RA0DE0110018

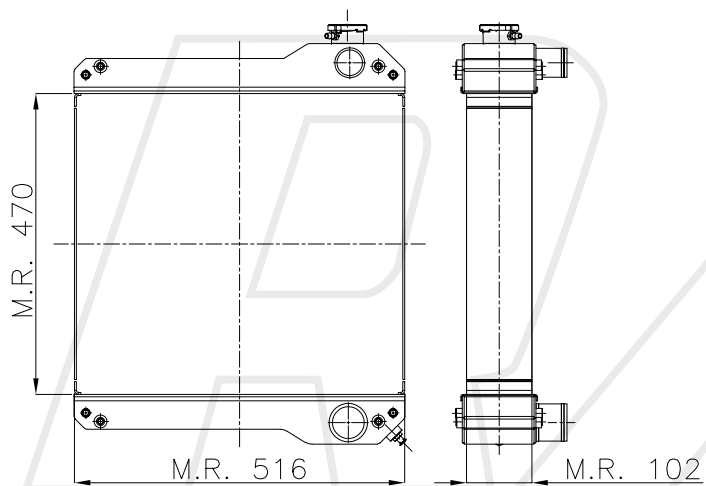
Drawing 3



Cod. RA0DE0110035

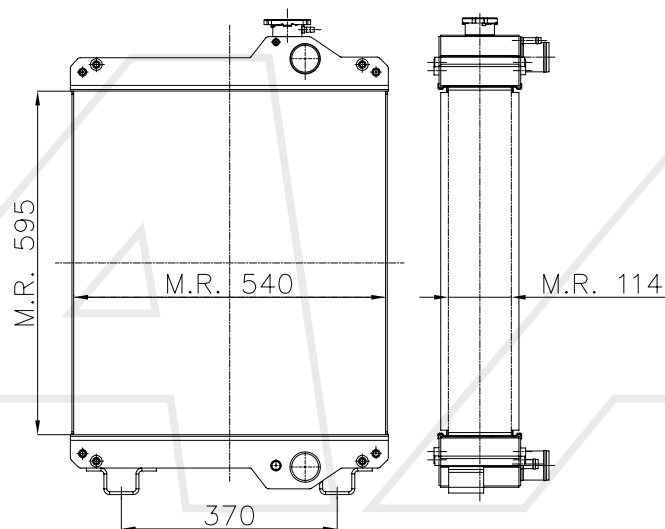
FORD MODELS

Drawing 1



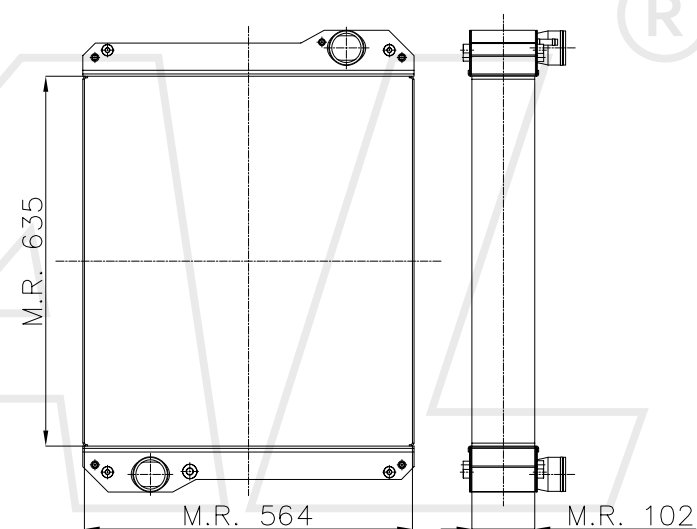
Cod. RA0NH0110094

Drawing 2



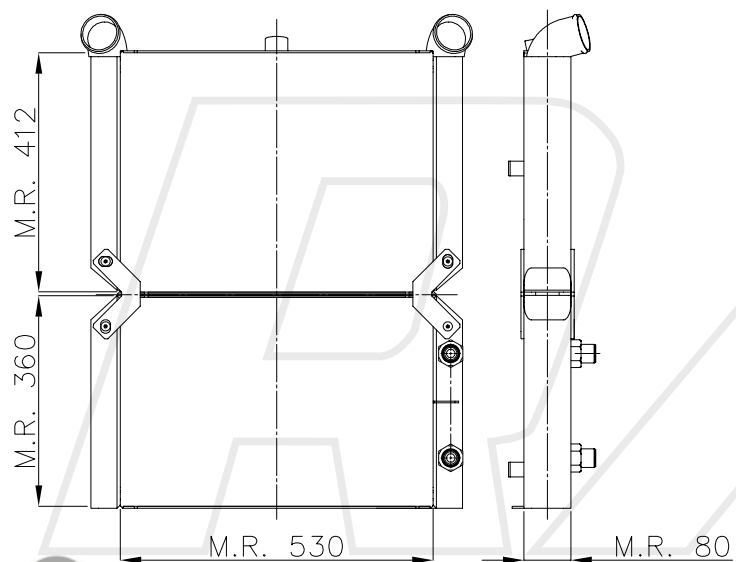
Cod. RA0NH0110184

Drawing 3



Cod. RA0NH0110185

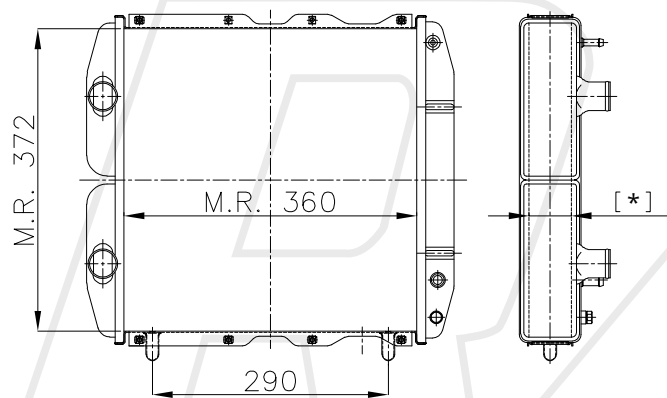
Drawing 4



Cod. GR0NH0110098

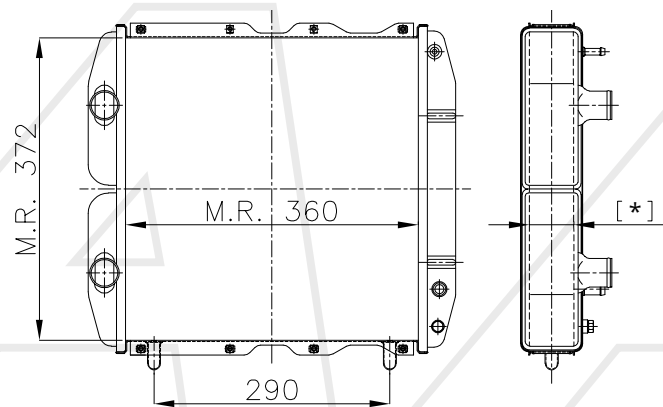
GOLDONI MODELS

Drawing 1



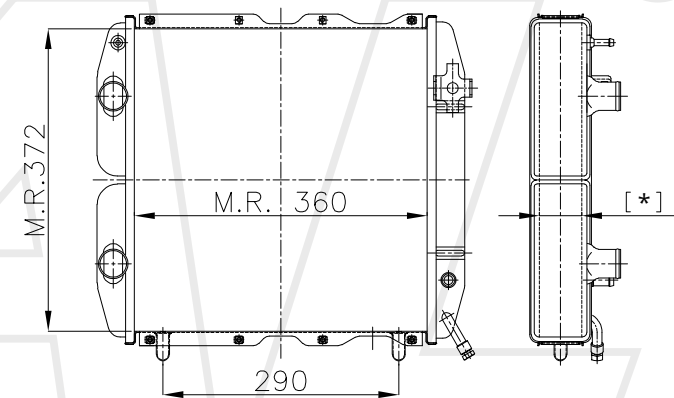
Cod. RA0GO0230010

Drawing 2



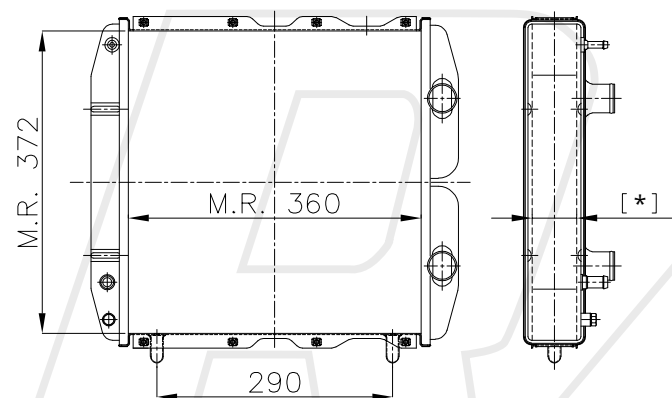
Cod. RA0GO0230011

Drawing 3



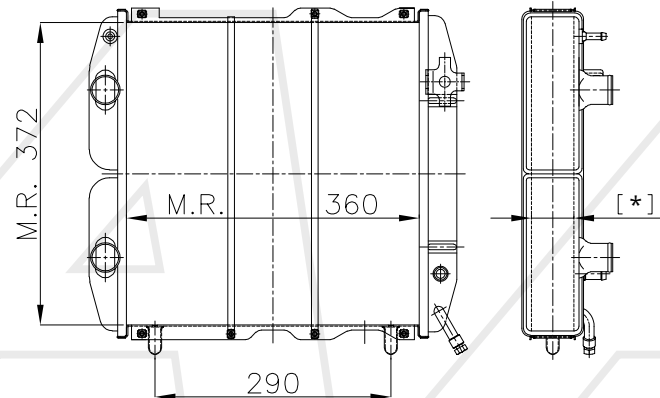
Cod. RA0GO0230021

Drawing 4



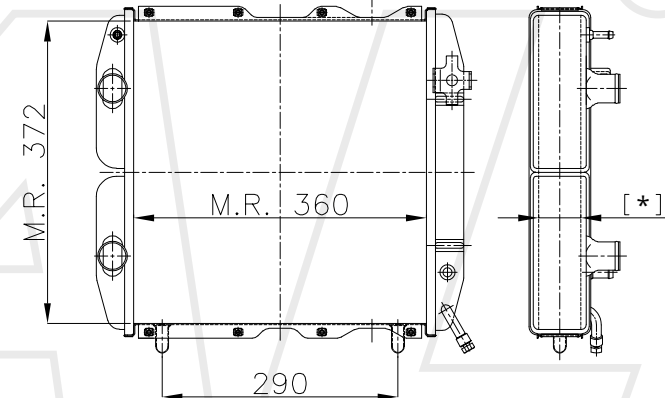
Cod. RA0GO0230013

Drawing 5



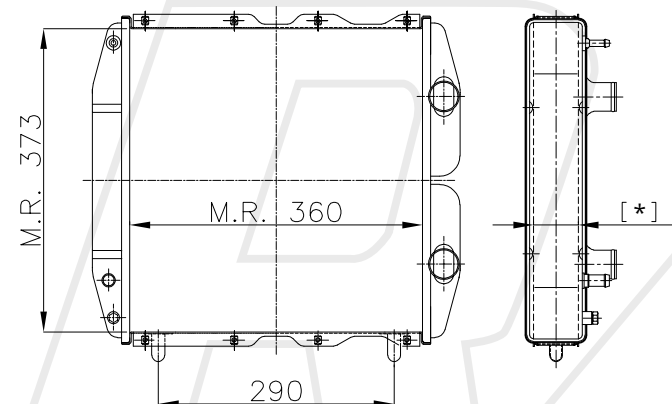
Cod. RA0GO0230024

Drawing 6



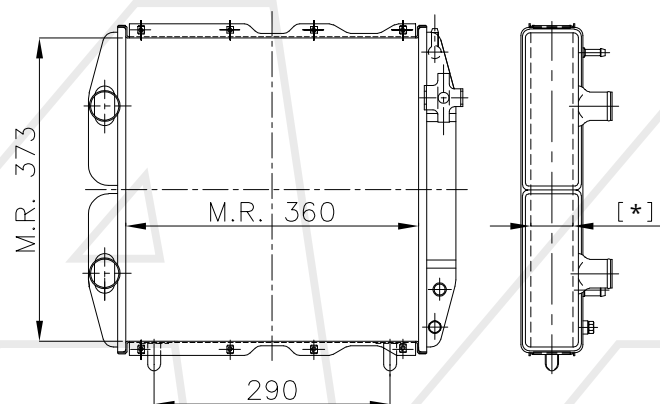
Cod. RA0GO0230023

Drawing 7



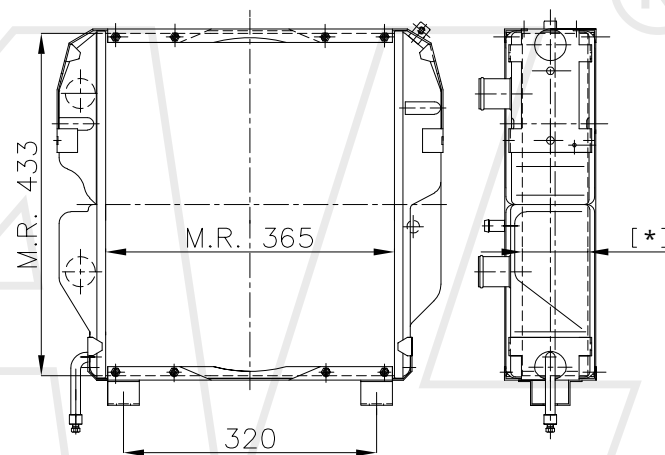
Cod. RA0GO0230012

Drawing 8



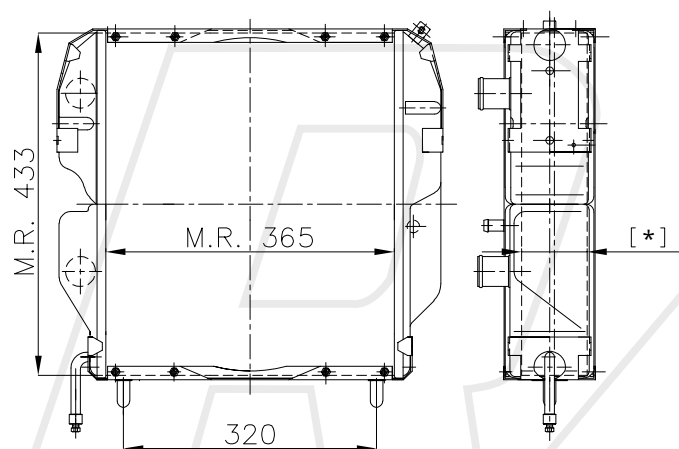
Cod. RA0GO0230002

Drawing 9



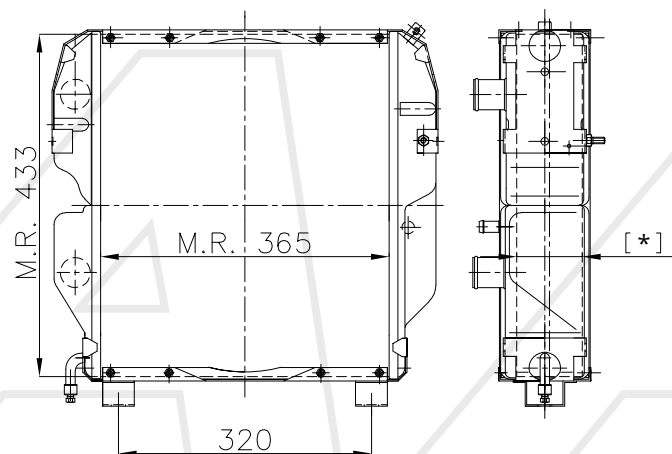
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Drawing 10



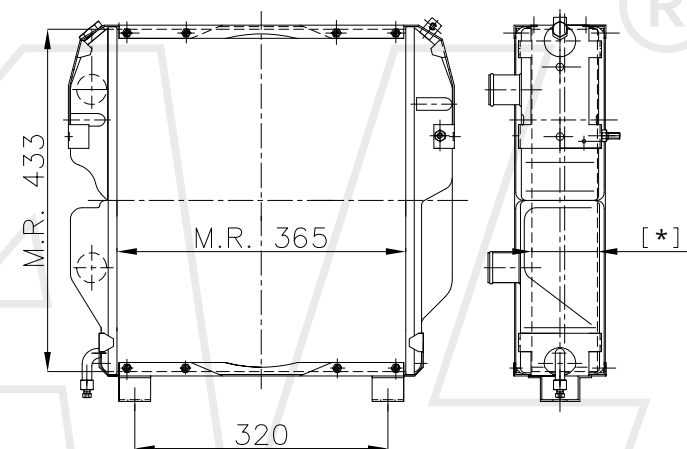
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Drawing 11



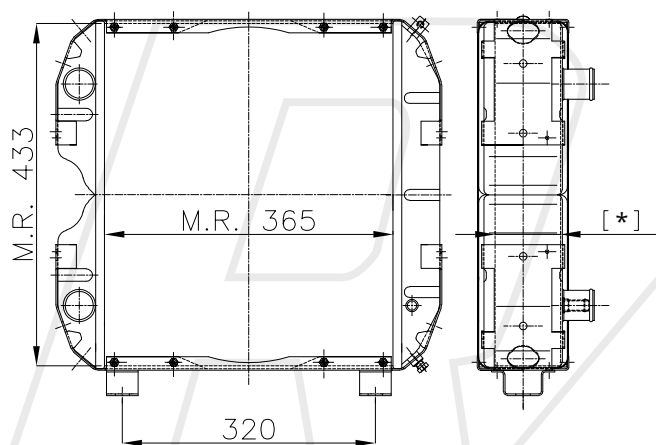
Cod. RA0GO0230015

Drawing 12



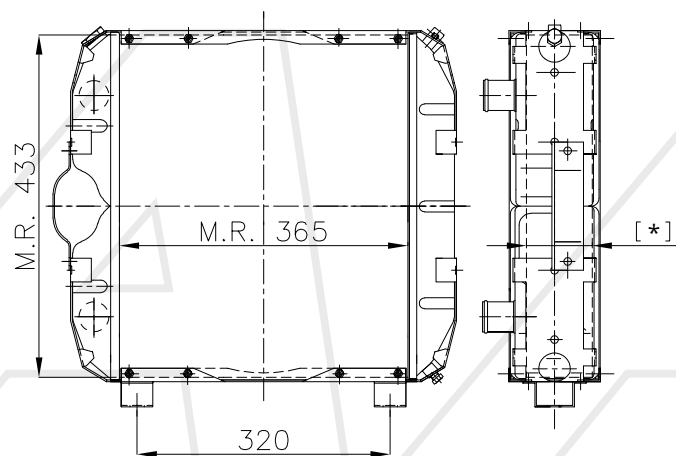
Cod. RA0GO0230009

Drawing 13



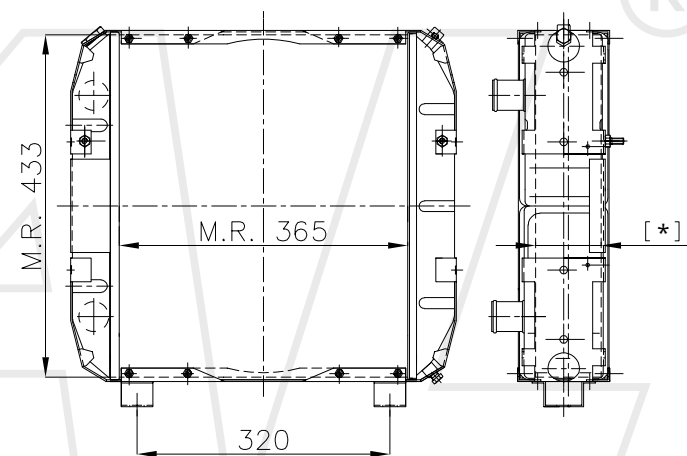
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Drawing 14



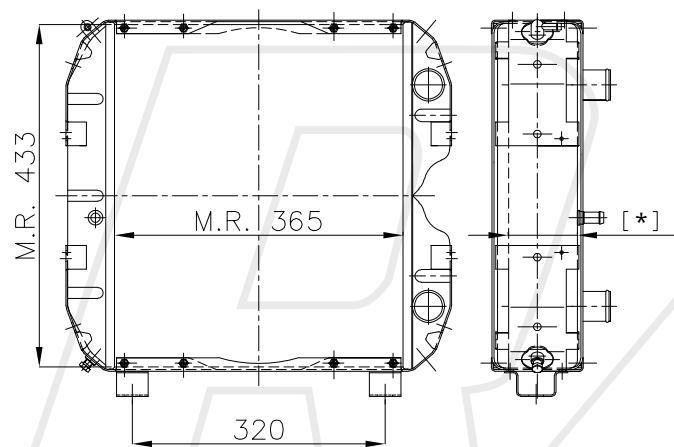
Cod. RA0GO0230007

Drawing 15



Cod. RA0GO0230014

Drawing 16

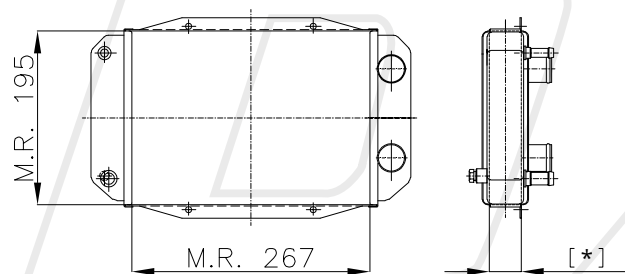


Cod. RA0GO0230001



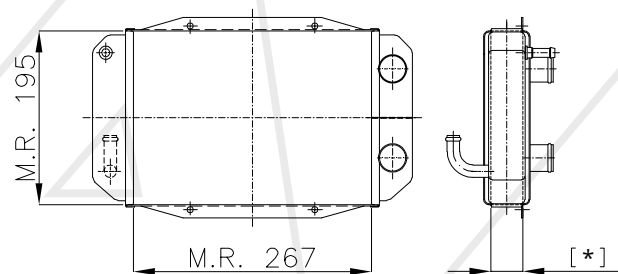
LOMBARDINI MODELS

Drawing 1



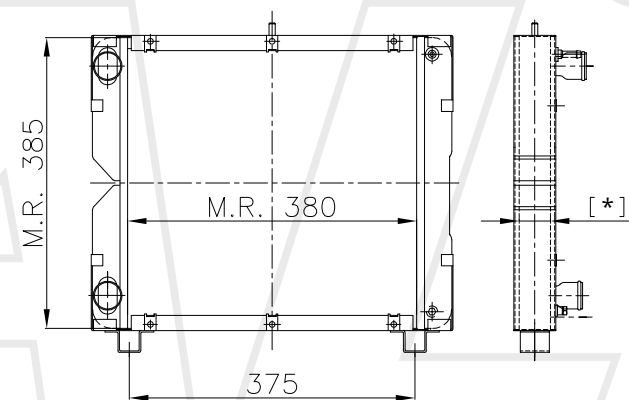
Cod. RA0LO0230008

Drawing 2



Cod. RA0LO0230027

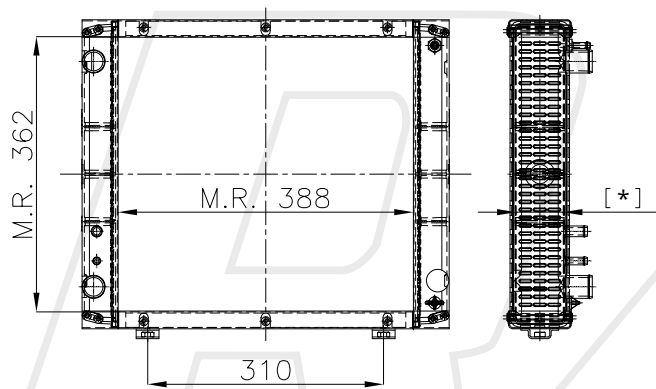
Drawing 3



Cod. RA0LO0230002

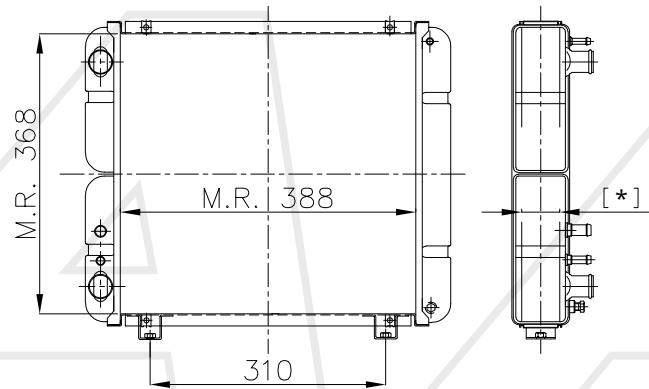


Drawing 4



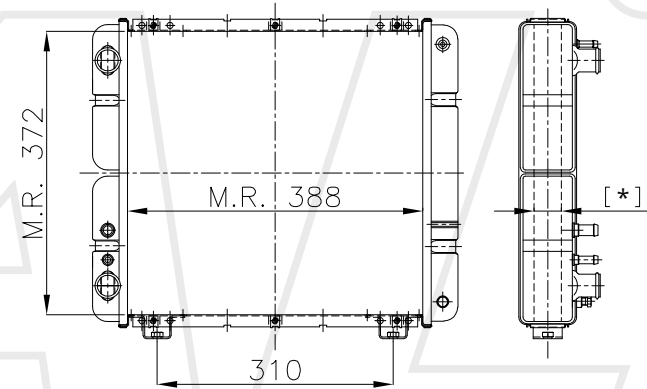
Cod. RA0LO0140045

Drawing 5



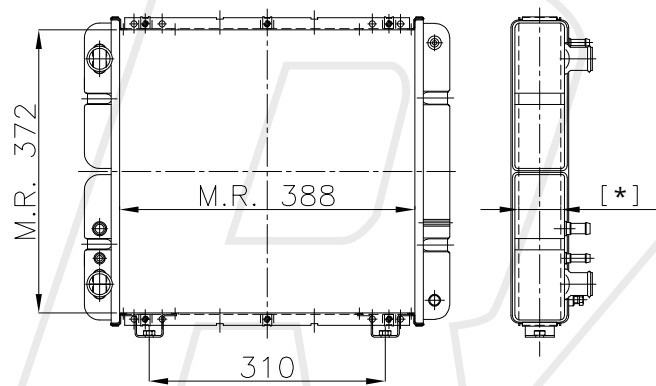
Cod. RA0LO0230030

Drawing 6



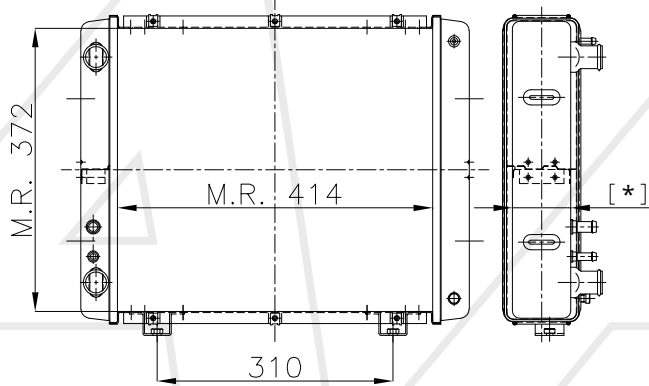
Cod. RA0LO0230031

Drawing 7



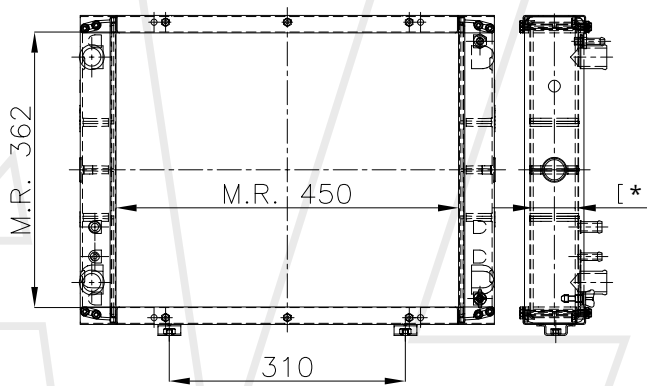
Cod. RA0LO0230033

Drawing 8



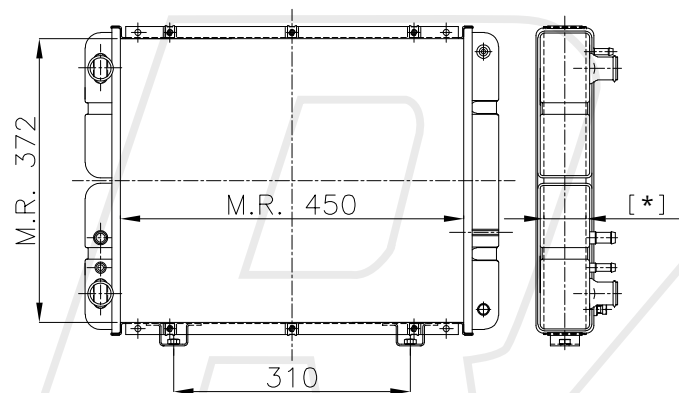
Cod. RA0LO0230034

Drawing 9



Cod. RA0LO0230046

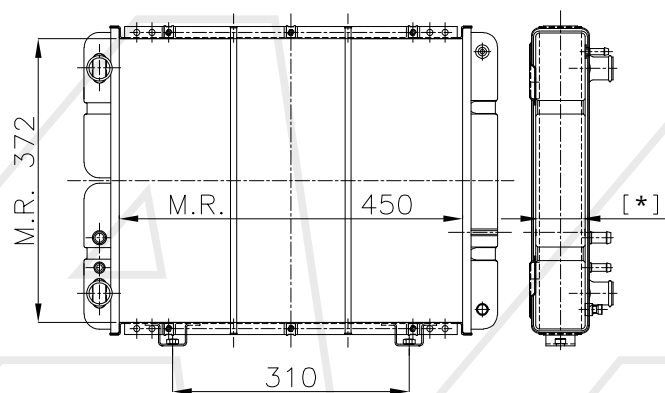
Drawing 10



Co Br

Cod. RA0LO0230035

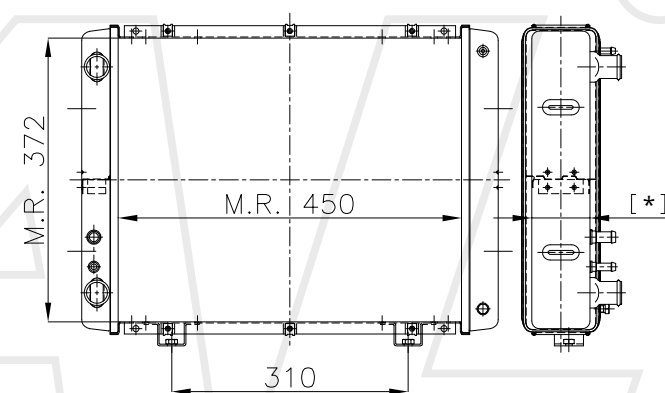
Drawing 11



Co Br

Cod. RA0LO0230037

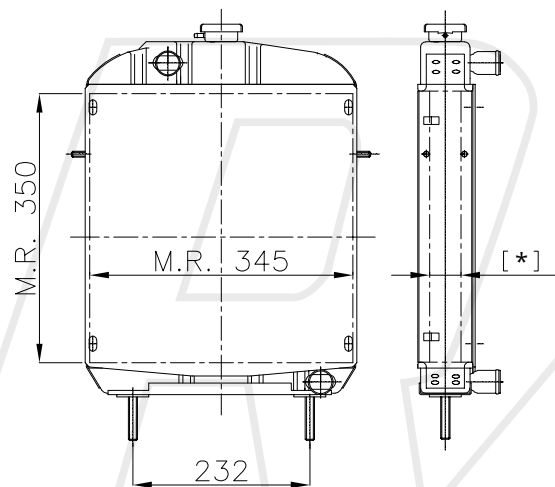
Drawing 12



Co Br

Cod. RA0LO0230038

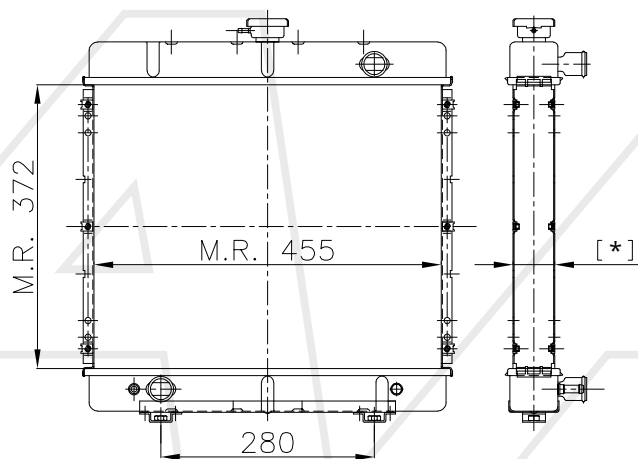
Drawing 13



Co Br

Cod. RA0LO0230006

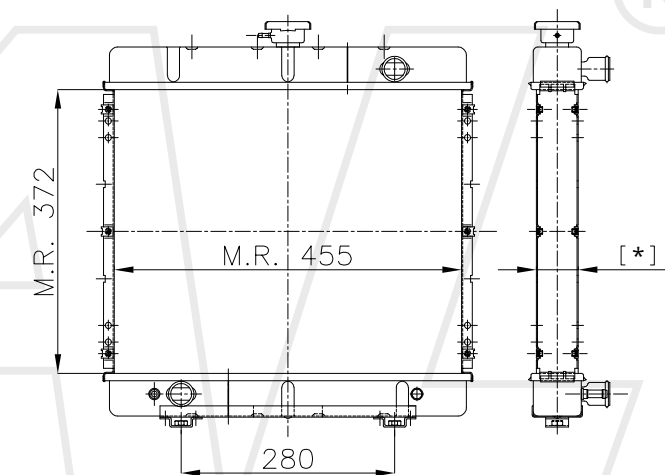
Drawing 14



Co Br

Cod. RA0LO0230021

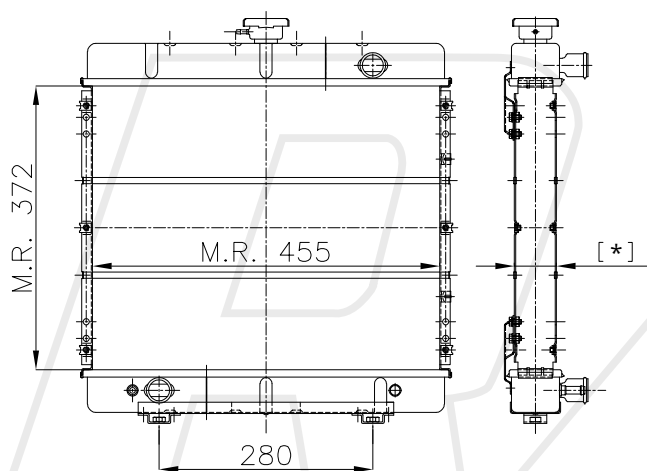
Drawing 15



Co Br

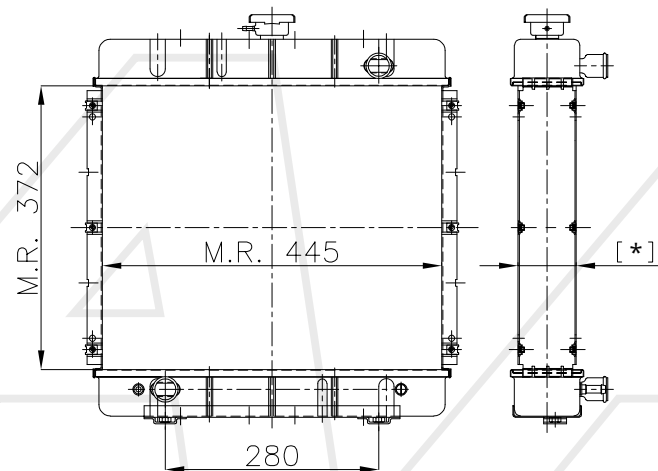
Cod. RA0LO0230039

Drawing 16



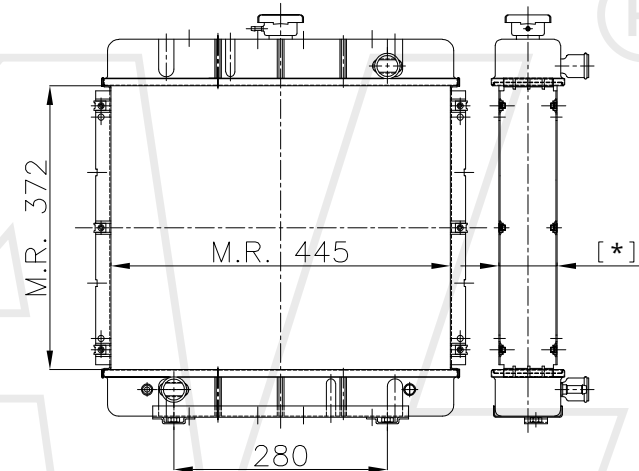
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Drawing 17



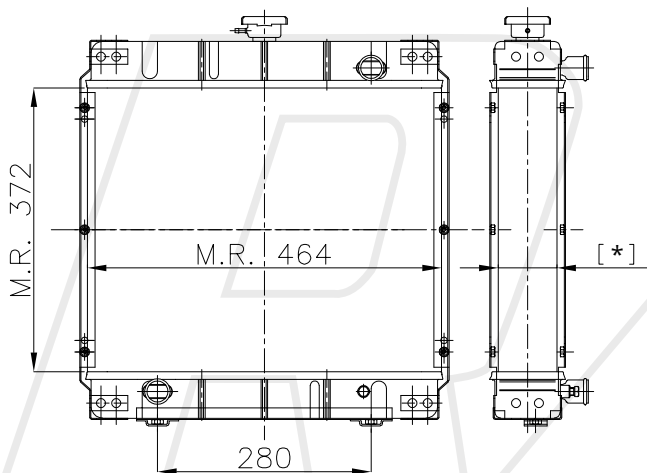
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Drawing 18



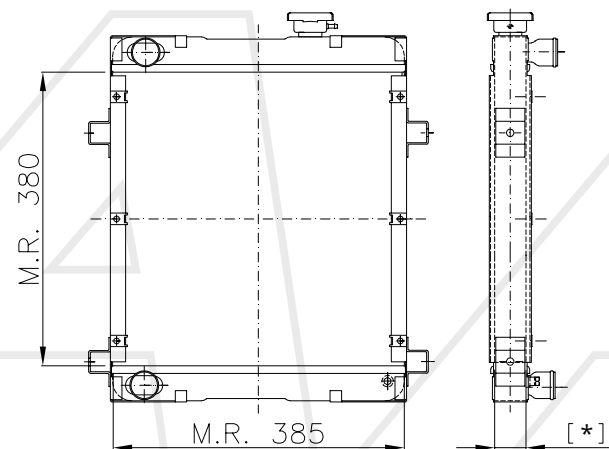
Cod. RA0LO0230042

Drawing 19



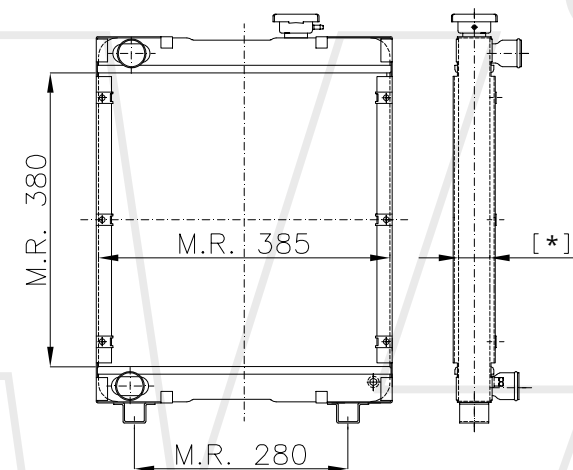
Cod. RA0LO0230011

Drawing 20



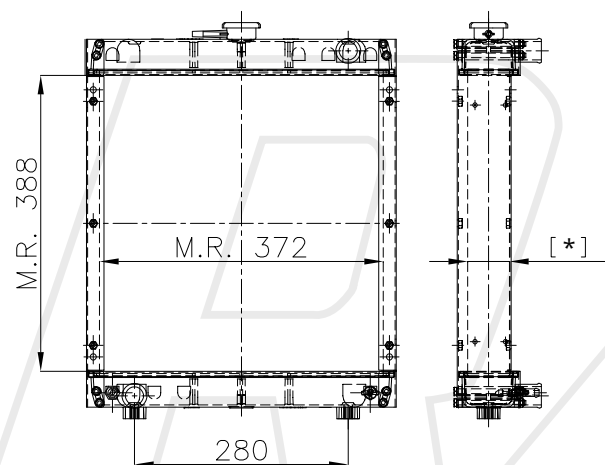
Cod. RA0LO0230005

Drawing 21



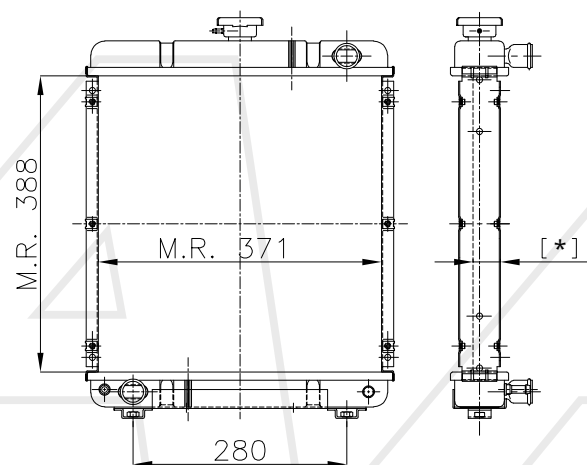
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Drawing 22



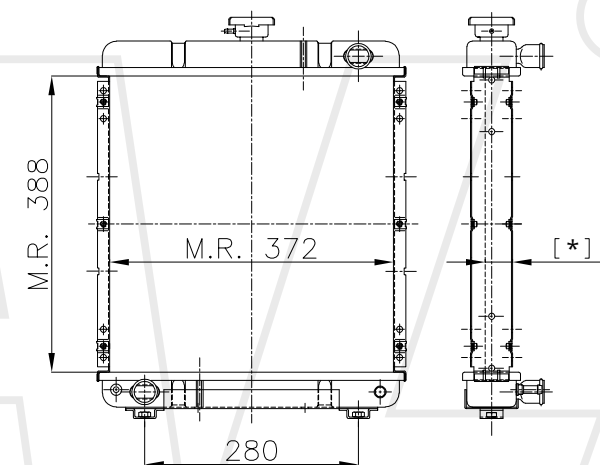
Cod. RA0LO0140044

Drawing 23



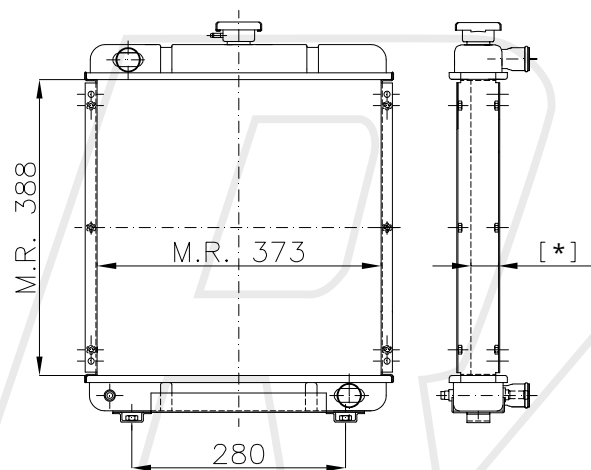
Cod. RA0LO0230024

Drawing 24



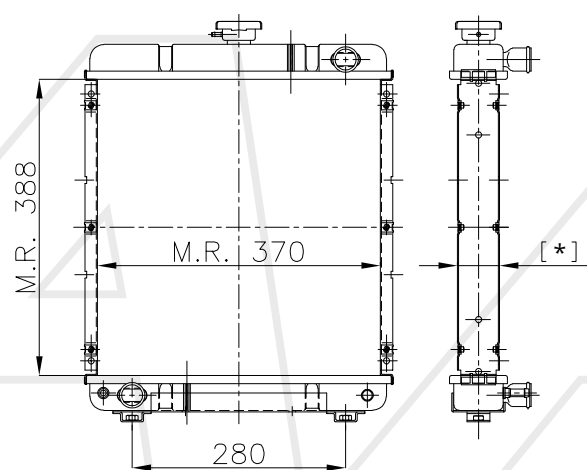
Cod. RA0LO0230036

Drawing 25



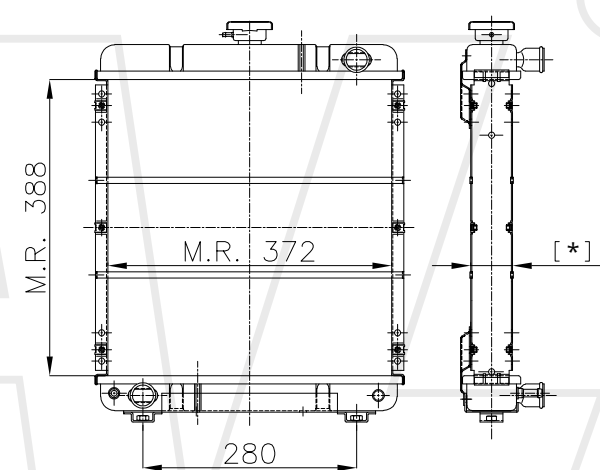
Cod. RA0LO0230013

Drawing 26



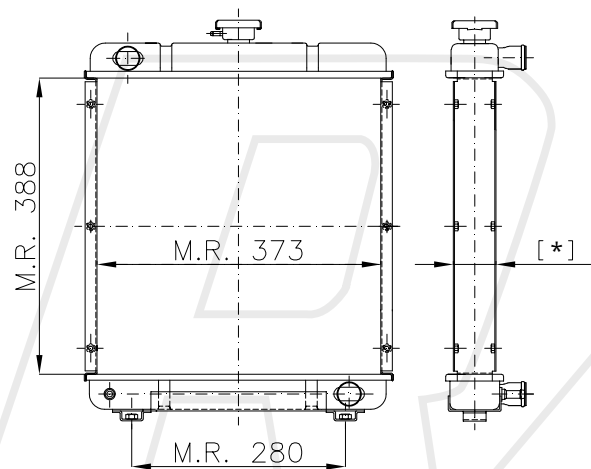
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Drawing 27



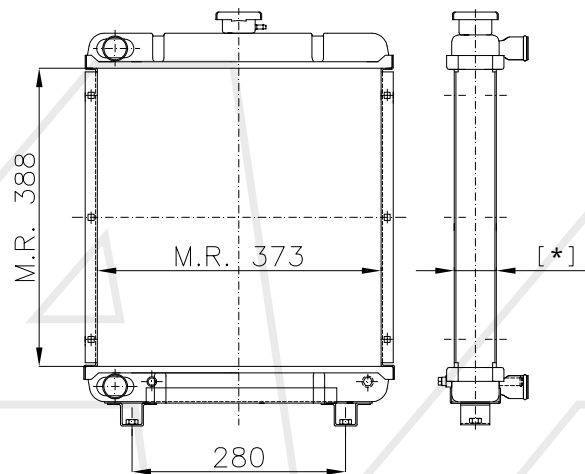
Cod. RA0LO0230047

Drawing 28



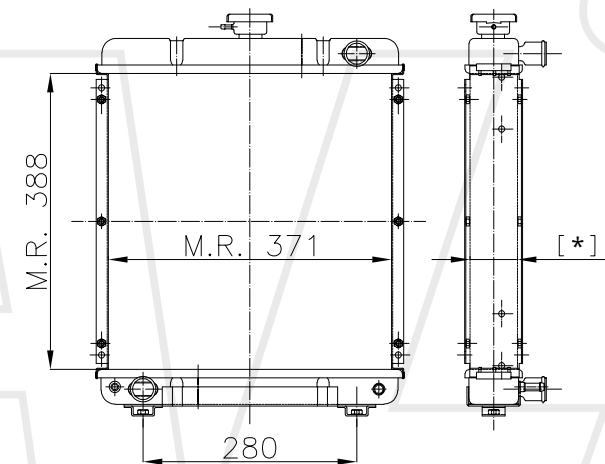
Cod. RA0LO0230012

Drawing 29



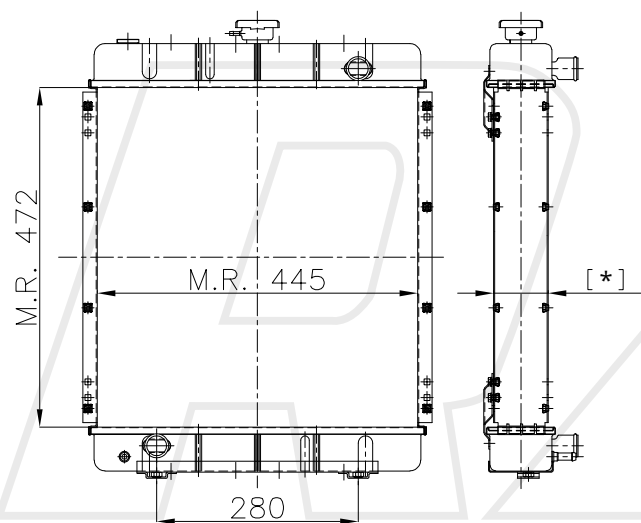
Cod. RA0LO0230048

Drawing 30



Cod. RA0LO0230049

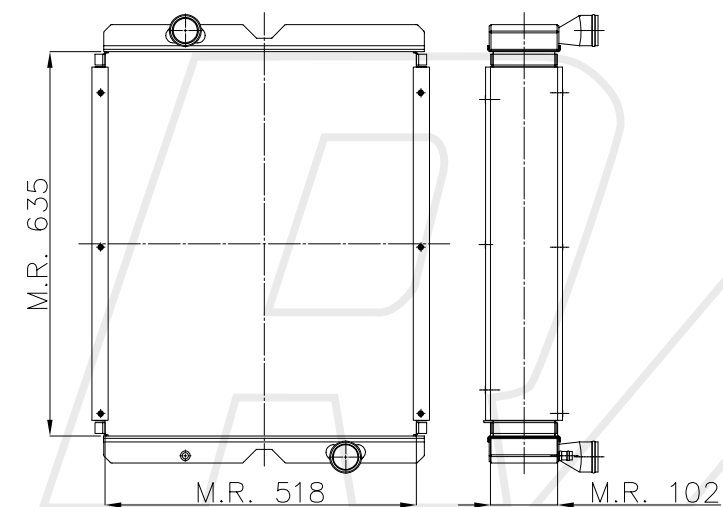
Drawing 31



Cod. RA0LO0230041

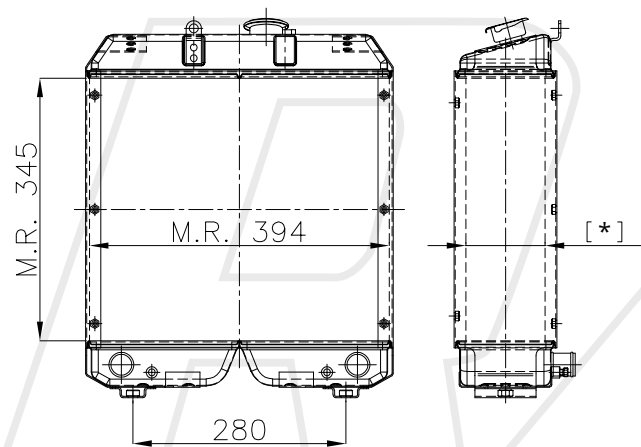
RENAULT MODELS

Drawing 1



SAME MODELS

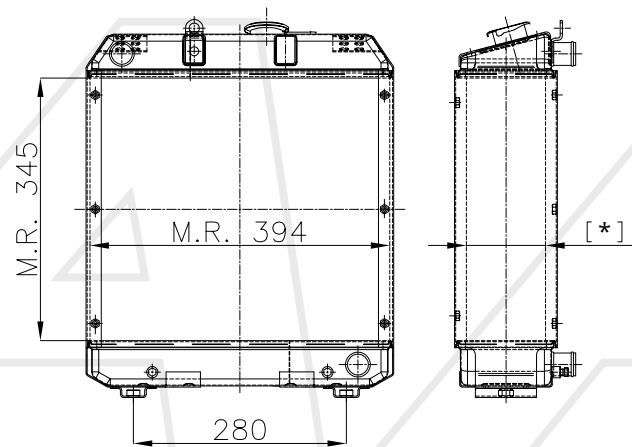
Drawing 1



Co Br

Cod. RASLH0230020

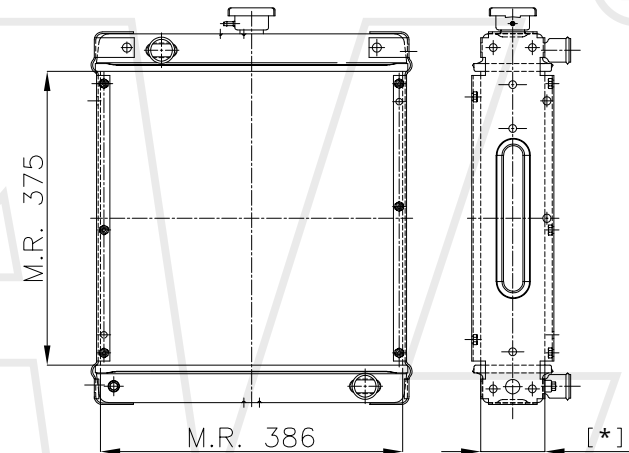
Drawing 2



Co Br

Cod. RASLH0230040

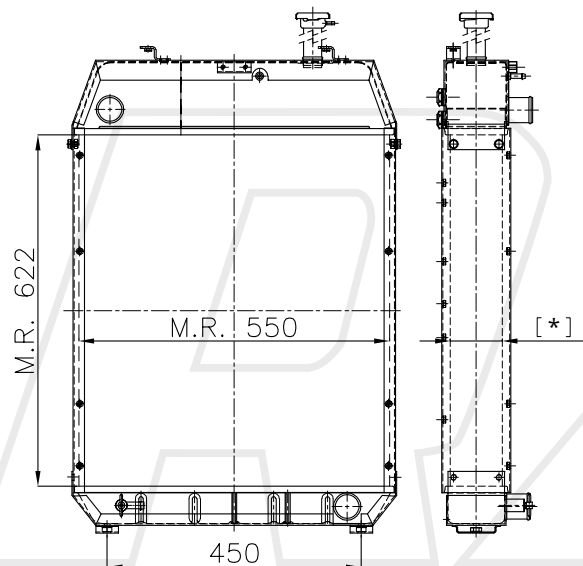
Drawing 3



Co Br

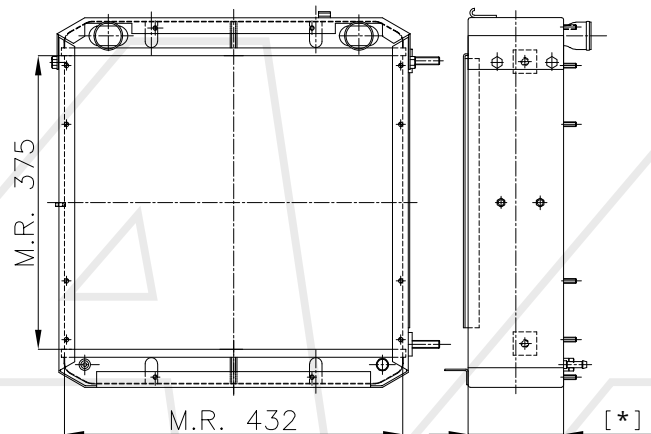
Cod. RASLH0230021

Drawing 4



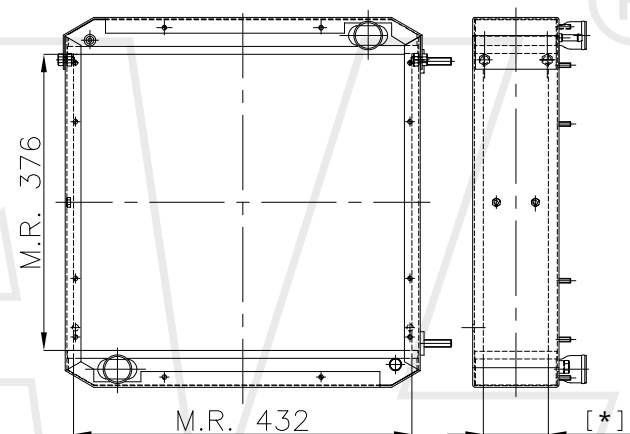
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Drawing 5



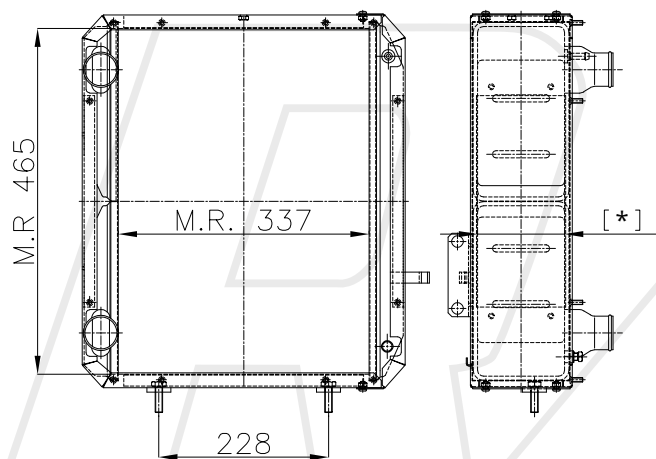
Cod. RASLH0230006

Drawing 6



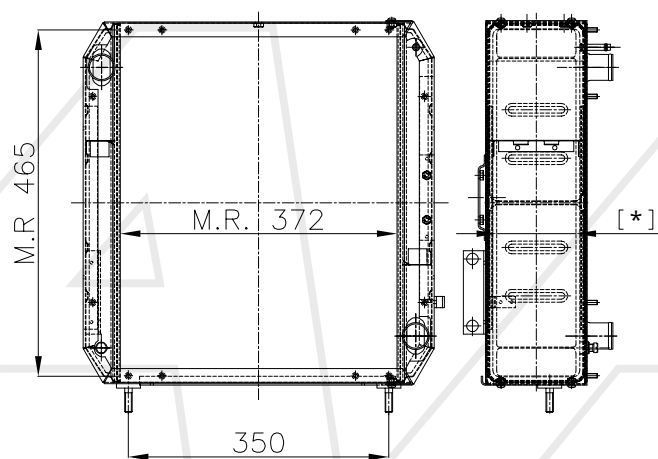
Cod. RASLH0230004

Drawing 7



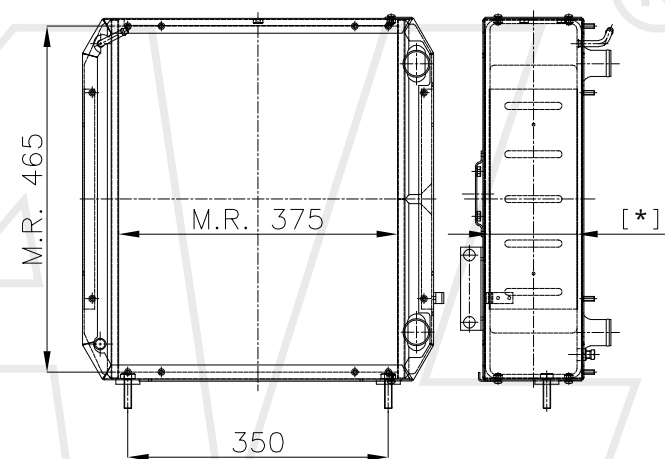
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Drawing 8



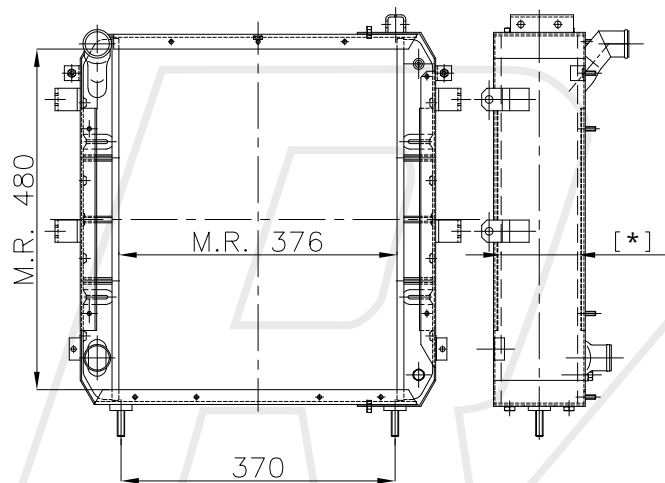
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Drawing 9



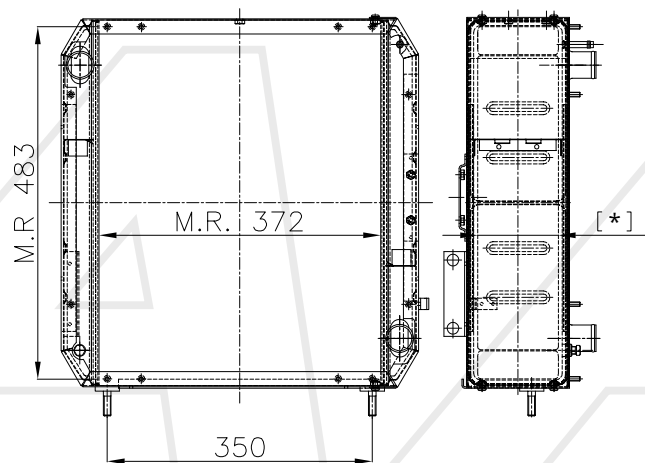
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Drawing 10



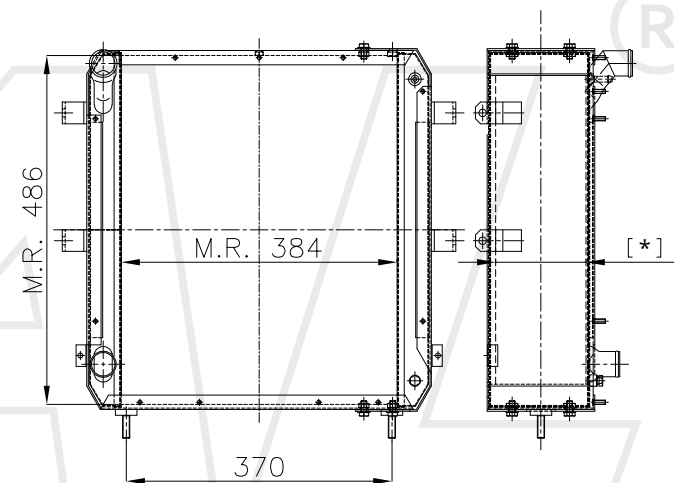
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Drawing 11



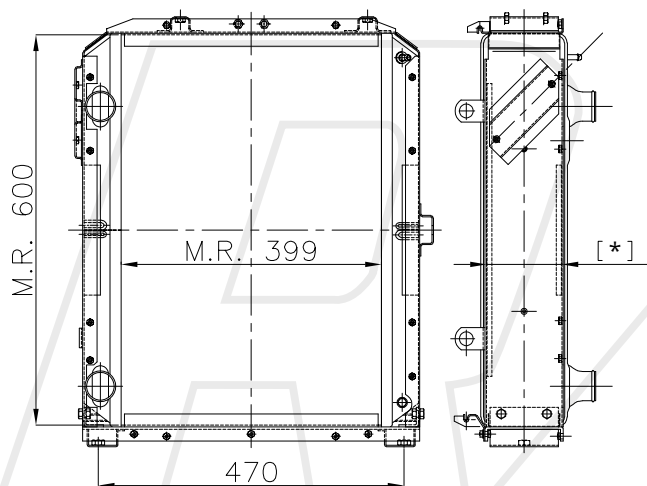
Cod. RASLH0230032

Drawing 12



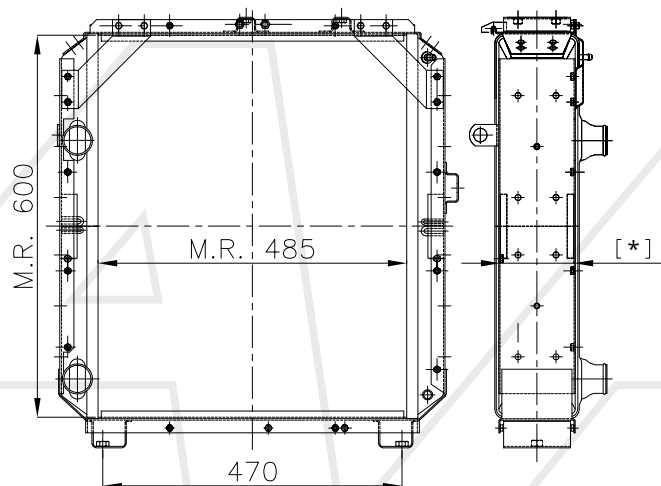
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Drawing 13



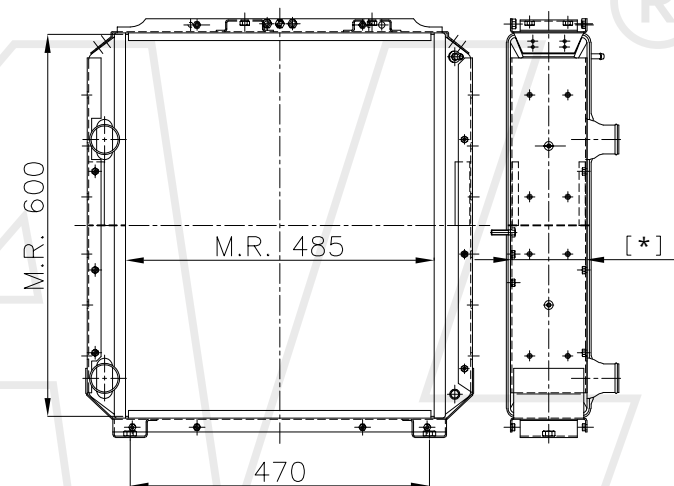
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Drawing 14



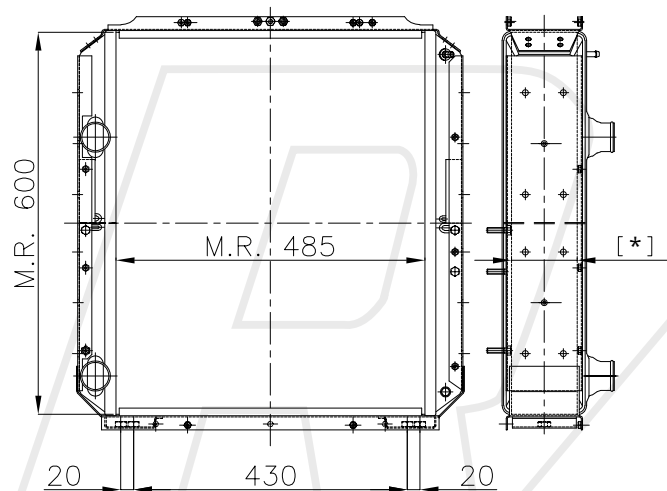
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Drawing 15



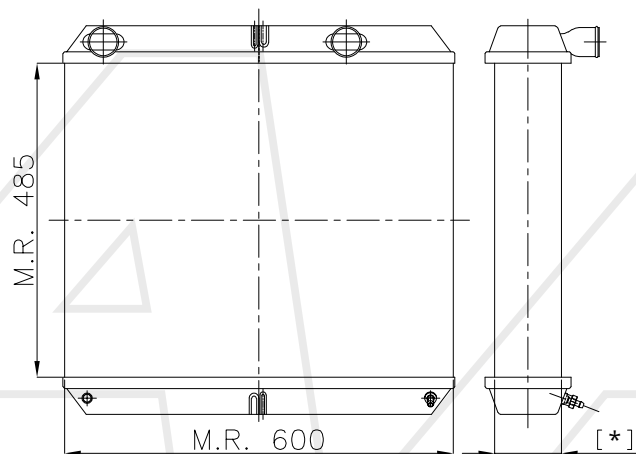
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Drawing 16



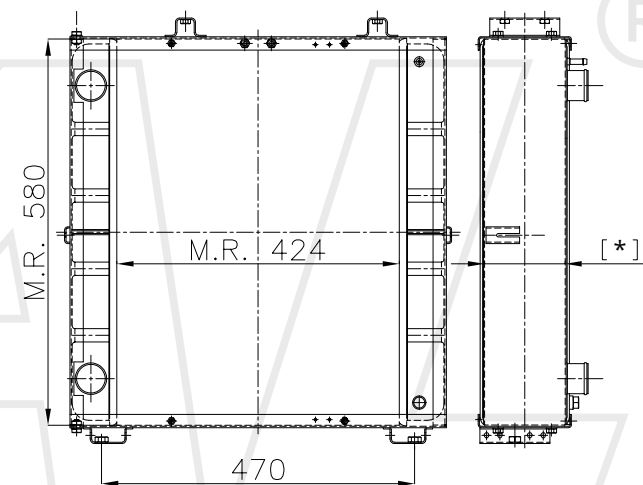
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Drawing 17



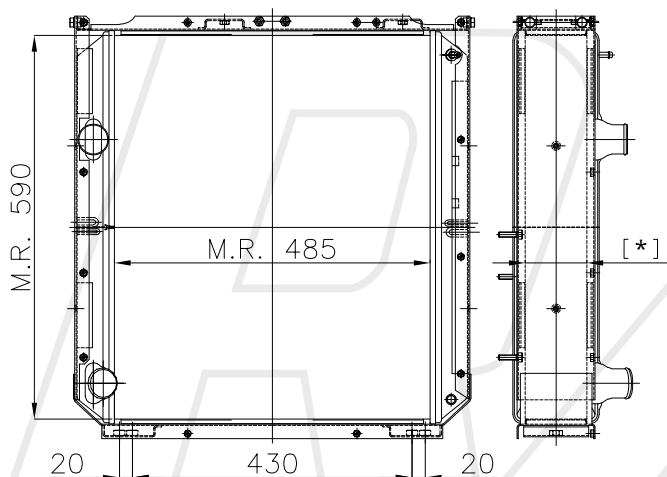
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Drawing 18



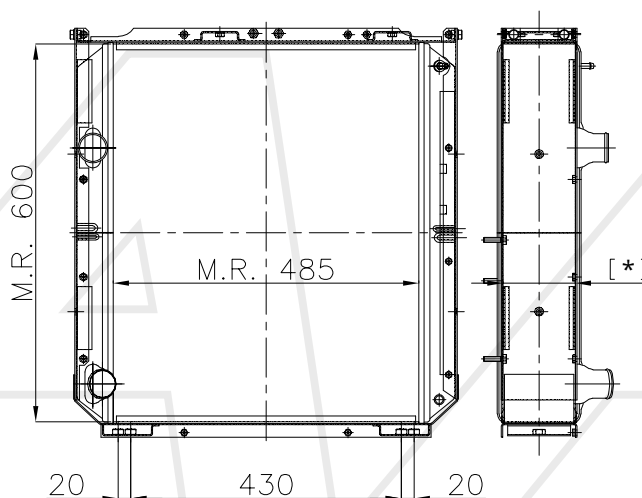
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Drawing 19



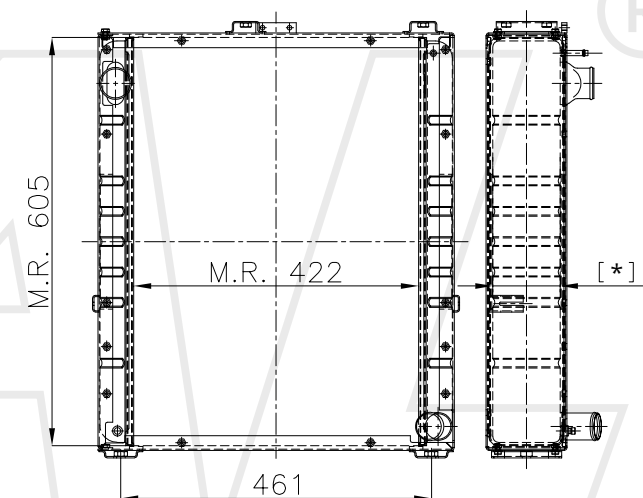
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Drawing 20



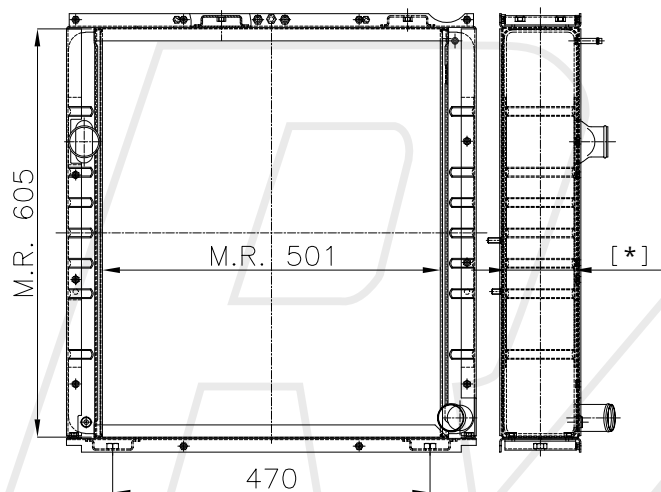
Cod. RASLH0230001

Drawing 21



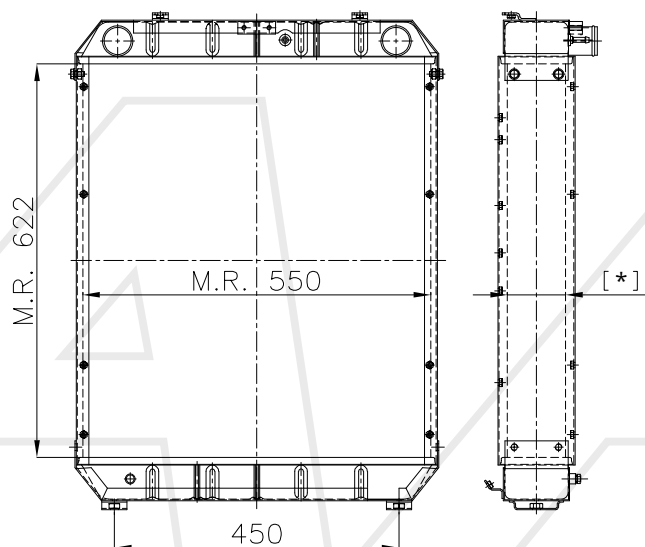
Cod. RASLH0230037

Drawing 22



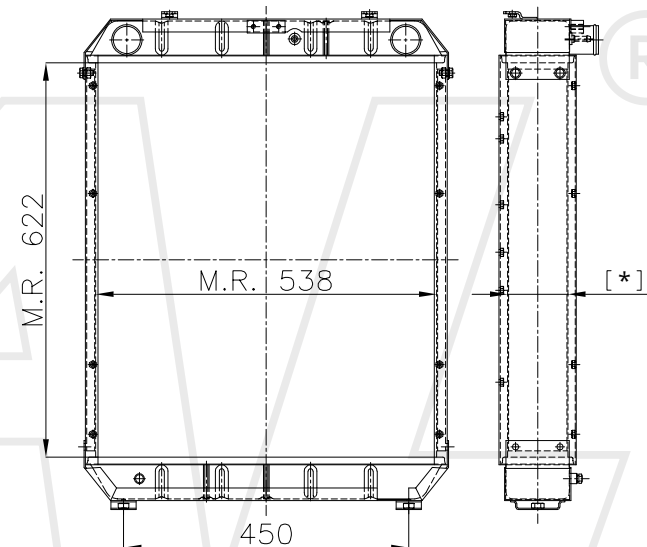
Cod. RASLH0230039

Drawing 23



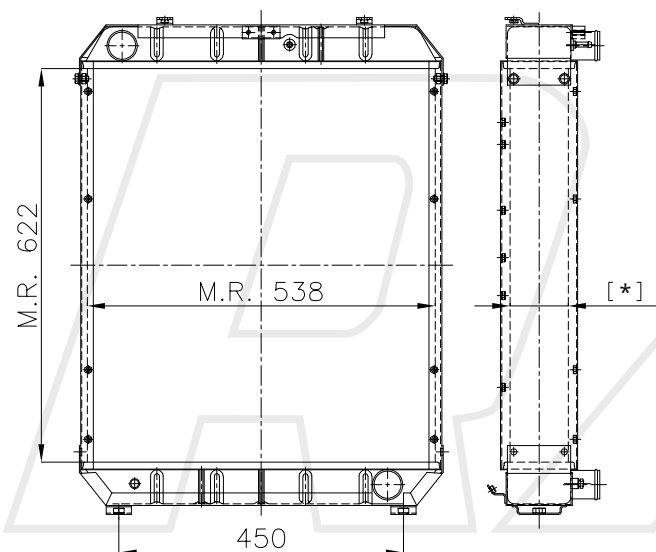
Cod. RASLH0230012

Drawing 24



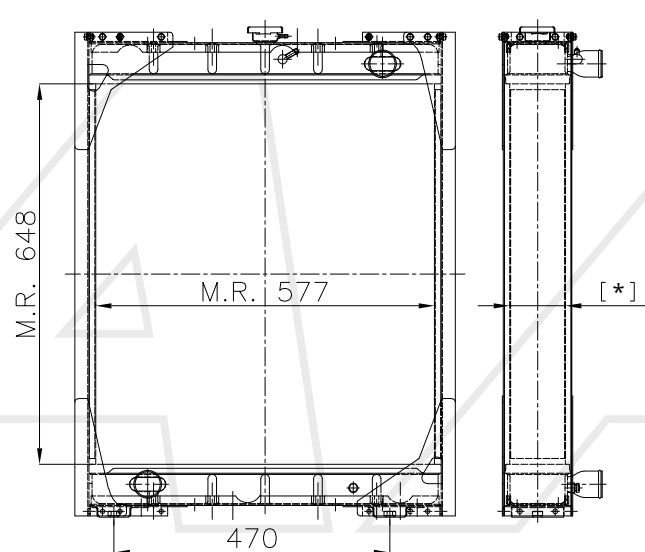
Cod. RASLH0230035

Drawing 25



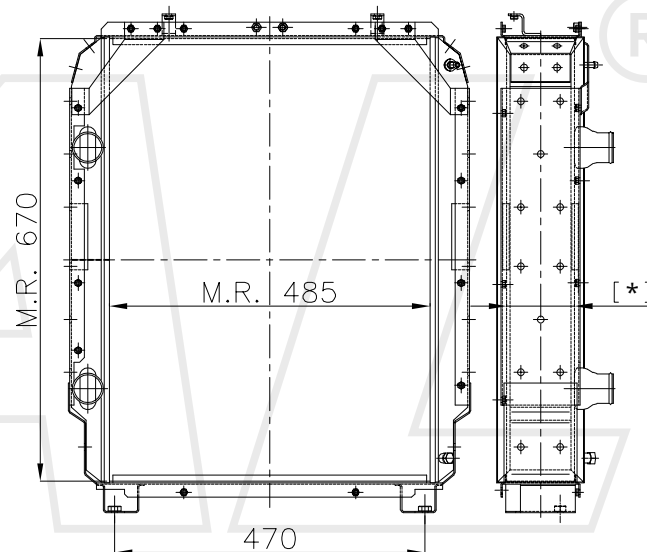
Cod. RASLH0230033

Drawing 26



Cod. RASLH0230016

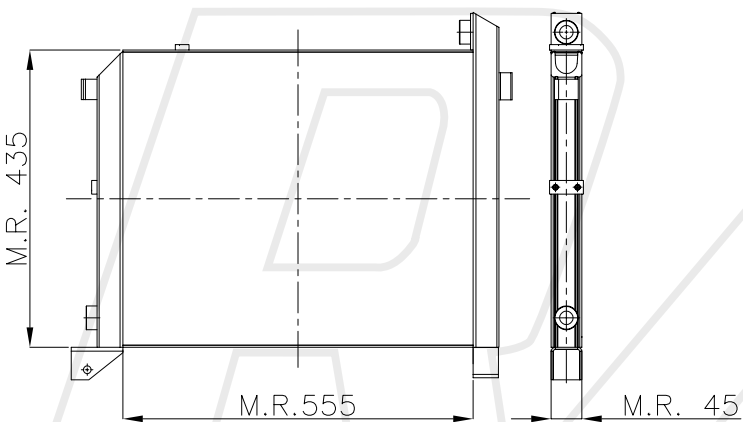
Drawing 27



Cod. RASLH0230013

VALTRA MODELS

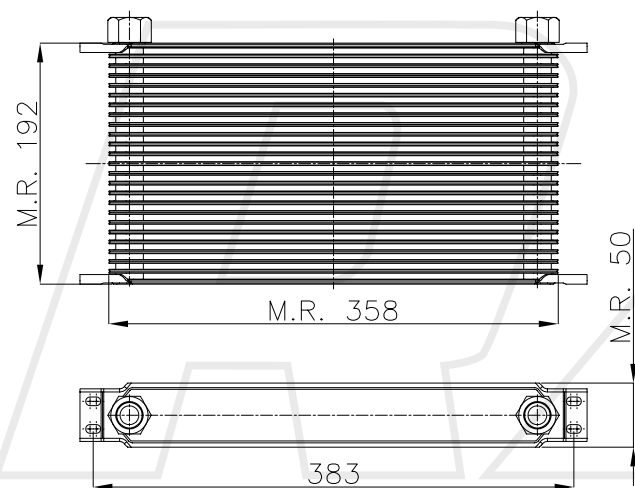
Drawing 1



Cod. RO0VA0110112

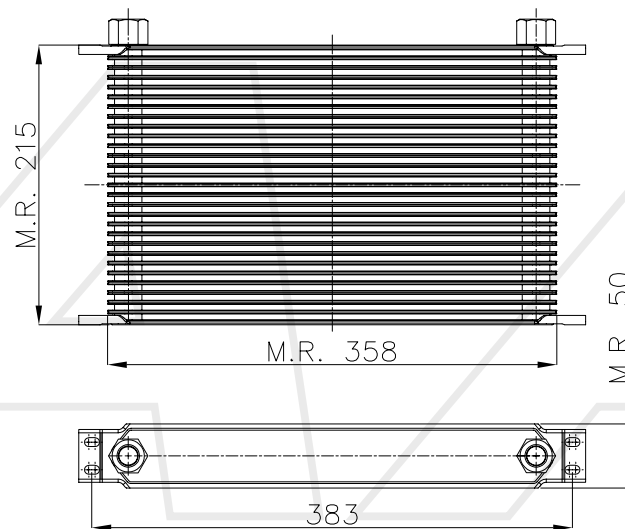
ZETOR MODELS

Drawing 1



Cod. RO0ZE0110016

Drawing 2



Cod. RO0ZE0110076

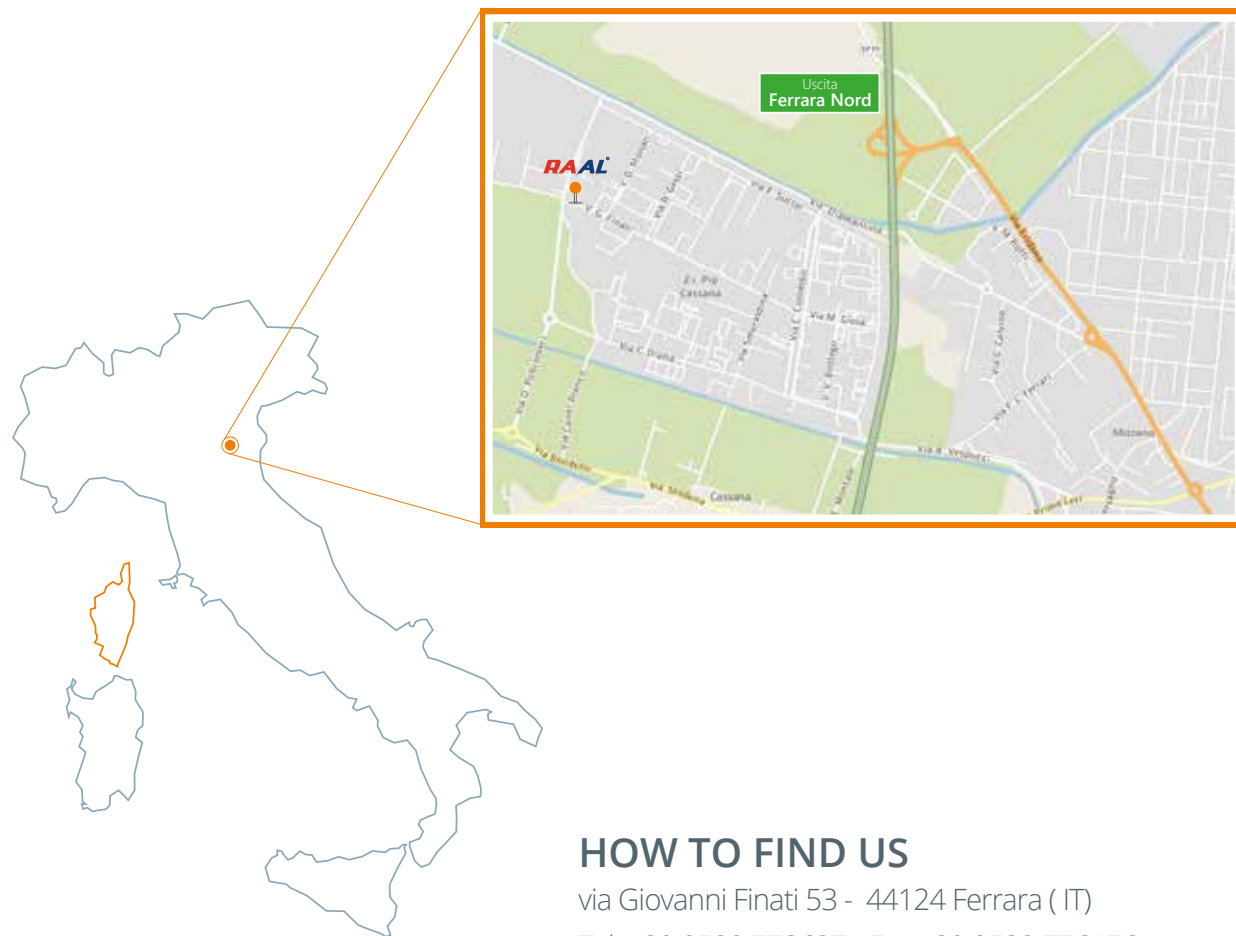


NOTES



NOTES

HOW TO FIND US



HOW TO FIND US

via Giovanni Finati 53 - 44124 Ferrara (IT)

Tel. +39 0532 773637 - Fax +39 0532 776476

<http://www.raal.it> - mail: info@raal.it



SALES CONDITIONS

APPLICABILITY:

All the relationships between the company and its customers are governed by these conditions of sale. The customer, the contribution of with every order, unconditionally accepted and agrees this conditions. Any exceptions must be previously agreed and accepted in writing by the Company.

PRICES:

The prices quoted by the company with its PRICE LIST are subject to some variation and / or change without notice. The prices are for goods on ex-stock of the Company. Any liability of the company decade since the goods leave the warehouse.

OFFERS:

The prices quoted by the Company's OFFER are valid until expiration date reported on it. After that period, the Company's commitment to keep the price proposed will end.

DELIVERY OF THE GOODS:

Delivery of the goods are sold ex departure warehouse, any costs of special packaging will be charged at total cost. In the absence of specific provisions, the Company will arrange all 'forwarding of the goods, Franco departure warehouse with the means they consider appropriate.

TERMS OF DELIVERY:

The availability of the goods in the warehouse means subject to prior sale. The delivery times are indicative, therefore delays cannot give right to cancellation of orders, much less claims.

PAYMENTS:

Previously agreed, the PAYMENTS must be made on time and in the ways agreed. Any delay in payment shall entitle the company to request the right to expenses and interest relating. The Company, in case of default by the customer,

reserves the right to terminate any supplies without any notice, to require the payment of the outstanding credit even if not yet expired and to take any action for the complete recovery of the credit.

RETURN OF GOODS:

In the event that it is necessary to return goods to the Company, the customer must ask for a written permission, must follow the instructions given in the guidance notes. Goods returned to the Company without authorization will be withdrawn. On the material, at the sole discretion of the company, the guarantee will be applied in accordance with regulations, stated in a separate document prepared by the Company.

TECHNICAL AND DESCRIPTIONS:

Is forbidden to anyone, reproduce in whole or in part drawings, descriptions and other set of price lists, catalogues and in general of all the advertising material published by the Company.

The publication of catalogues and price lists, in order to shape, exposure, layout or other, similar to what proves published by the Company and are therefore able to confuse the public as to the real origin of the products offered by the Company, will be prosecuted according to the law. Drawings and directions given on the material published by the Company shall be understood as indicative and not binding, the Company reserves the right to make modifications without notice.

COURTS:

For matters not governed by this terms, will be worth the provisions of Italian law. The court of Ferrara shall have exclusive jurisdiction over any legal disputes relating to the terms and conditions mentioned above.

RAAL

All products are manufactured in accordance with high standards of quality and are validated in RAAL own R&D and testing facilities.

QUALITY MANAGEMENT SYSTEM
ISO 9001:2008
ISO/TS 16949:2009

ENVIRONMENTAL MANAGEMENT SYSTEM
EN ISO 14001:2004

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM
OHSAS 18001:2007

- welding process
- bracing operators and welders
- bracing and welding procedures
- pressure equipment
- railway vehicles

EN ISO 3834-2
DIN EN 13133
EN ISO 9000-2
EN 14118
AENOR / Section IX
EN ISO 15914-2
DIN EN 13134
PED 97/23/EC
EN 15085-2

CERTIFICATES 1998 – the first quality certification according to ISO 9001

CERTIFICATE

This is to certify that

RAAL S.A.
St. Industrial n. 7
43000 Santa Bàrbara de Noya, Barcelona
with the organizational activities as stated in the annex

has implemented and maintains a **Quality Management System**

Scope:
Design, manufacture and sales of track components for engines, vehicles and industrial applications

Through an audit, implemented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

Certificate registration no.: 04070-0008
Valid from: 2010-03-22
Valid until: 2010-09-14
Date of certification: 2010-03-22

DNV Group
G. Böhmer
DNV Business
Norwegian
11/1

CERTIFICATE

This is to certify that

RAAL S.A.
St. Industrial n. 7
43000 Santa Bàrbara de Noya, Barcelona
with the organizational activities as stated in the annex

has implemented and maintains a **Quality Management System**

Scope:
Design and development of new designs

Through an audit, implemented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO/TS 16949 : 2009
with annex 2009

Certificate registration no.: 04070-0008
Valid from: 2010-03-22
Valid until: 2010-09-14
Date of certification: 2010-03-22

DNV Group
G. Böhmer
DNV Business
Norwegian
11/1

CERTIFICATE

This is to certify that

RAAL S.A.
St. Industrial n. 7
43000 Santa Bàrbara de Noya, Barcelona
with the organizational activities as stated in the annex

has implemented and maintains an **Environmental Management System**

Scope:
Design, manufacture and sales of track components for engines, vehicles and industrial applications

Through an audit, implemented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 14001 : 2004 + Cor 1 : 2009

Certificate registration no.: 04070-0008
Valid from: 2010-03-22
Valid until: 2010-09-14
Date of certification: 2010-03-22

DNV Group
G. Böhmer
DNV Business
Norwegian
11/1

CERTIFICATE

This is to certify that

RAAL S.A.
St. Industrial n. 7
43000 Santa Bàrbara de Noya, Barcelona
with the organizational activities as stated in the annex

has implemented and maintains an **Occupational Health and Safety Management System**

Scope:
Design, manufacture and sales of track components for engines, vehicles and industrial applications

Through an audit, implemented in a report, it was verified that the management system fulfills the requirements of the following standard:

BS OHSAS 18001 : 2007

Certificate registration no.: 04070-0008
Valid from: 2010-03-22
Valid until: 2010-09-14
Date of certification: 2010-03-22

DNV Group
G. Böhmer
DNV Business
Norwegian
11/1

CERTIFICATE

The company

RAAL S.A.
St. Industrial n. 436
43000 Santa Bàrbara de Noya

fulfills the
Comprehensive Quality Requirements according to
EN ISO 3834-2

for the range mentioned in the annex to this certificate.

The certificate expires on February 2018

Order No.: 10-243-17-002 / 002-214-000
Signed: April 07th 2010

TEN 800 Industrial Service GmbH
Wiesentheidle 196, D-90580 München

Department:
Material and Welding Technology

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CERTIFICATE

This company

RAAL S.A.
St. Industrial n. 436
43000 Santa Bàrbara de Noya

has been audited according to
AD 2000-Mechanism HP 5, TRD 301, EN 13446-4 and EN ISO 3834-2

The company has proved to fulfill the requirements of the provisions for the manufacture, use of pressure equipment as defined in
Pressure Equipment Directive 97/23/EC

Independently to this, the manufacturer is responsible for the compliance with the following provisions:

- The company
- has facilities permitting manufacturing and inspection in compliance with the current technical standards.
- operates a quality system which guarantees that manufacturing and inspection of the products related to gas, liquid and in compliance with the technical rules and standards.
- arranges quality responsibility with inspection personnel

The scope of the audit is detailed in our Report No. 10-243-17-002-214-000

The certificate expires on February 2018

Signed: April 07th 2010

TEN 800 Industrial Service GmbH
Wiesentheidle 196, D-90580 München

Department:
Material and Welding Technology

10/1



