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KOYO ${ }^{\circ}$ Elevator
Lead The Best Life

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## COMPANY PROFILE

Lead the best life
KOYO® $^{\oplus}$, as an outstanding representative of Chinese elevator companies, is specialized in designing, researching, manufacturing, selling, installing and maintaining. Combining advanced technique with Chinese traditional aesthetic, KOYO team with its own main board and control system, try their best to perfect products. Since 2002, KOYO products have been exported over 98 countries including America, South Africa, Germany, France, Italy, England and so on.
"Created in China"-KOYO, well-known Brand across the world
KOYO creates the perfect service experience with first-class quality of the staff. The perfect fusion of technology creates the world's leading elevator products, which is able to bring its products all over the world. KOYO has rewritten Chinese history and created the world famous elevator brand.

## Using "No.1" achieves "Created in China"

From "Made in China" to "Created in China", KOYO creates the perfect products with enthusiasm, bears fruit with its effort, and gets proud achievements. KOYO has completed world "NO.1" one by one, set the example for China private enterprises, and created the world's sixteen "No.1".


## KOYO ESCALATOR DESCRIPTION

KOYO escalators and passenger conveyors, complying Europe latest EN115 \& China GB16899-2011 standards, are adopted new materials and advanced technology to carry on its design and manufacture. They have been operating smoothly, low noise and high reliability, high structure. They are durable and easy to maintain

Because of its superior design concept and advanced manufacturing process, KOYO escalator and passenge conveyor with exquisite structure, excellent step road, delicate lead way and elegant shape.

## KOYO Escalator Description

KOYO escalator and passenger conveyor has full range specifications, beautiful shape, flexible layout which are widely used in shopping malls, supermarkets, subways, airports, exhibition centers etc.

## - C C SGS

ISO9001:2008 / ISO14001:2004 / OHSAS18001:2007


## KOYO ESCALATOR CONTROL CABINET

According to the requirement of modern industrial product design, KOYO escalator control cabinet applies the golden section design method for the section size of the cabinet and each part, which makes the cabinet be elegant and new appearance. In view of the heat radiating problem, the heat radiating holes on the upper and below part of the cabinet has been designed. When the electrical components generate heat, the heat will be exhausted through the upper holes as the heat generates and he cold wind will consistently enter into the cabinet through the below holes, which makes the sealed cabinet become an air duct to realize the heat radiating purpose.

Koyo escalator control cabinet with sealing design is approved by third testing party and labeled as security level of IP54, which can be used in different working condition. The cabinet door and operating handle of breaker or isolating switch is designed with a mechanical interlock, the handle can be opened only when the door is in the subsection position which improves th safety of operator.

KYM08E301 embedded automatic escalator control board
KYMO8E301 embedded automatic escalator control board is on the basis of ARM 32 microprocessor which is independently developed by KUNSHAN KOYO Elevator Co., Ltd is a product of high technology and delivers a stable quality performance and high capacity of anti-interference. This product has the following characteristics.

ARM 32 embedded micro processor
Basic points: 36 points input and 24 points output and extended to 68 points input

- Frequency conversion, star-delta is available to choose, operation and repair model is available to choose.

Key input, LED display, parameters to be set up and history record to be stored.

- Automatic diagnosis of defect and history record can be stored with capacity of 1000 items.
- Long-distance control communication interface (RS485 and CAN)

Real-time clock for power failure protection.

Escalator programmable electronic safety related systems (PESSRAE)
The systems meet with European standard: EN115-1:2008+A1:2010 and IEC61508 on the corresponding requirement of the programmable electronic safety related systems.
The system uses the security controller: G9SP, the controller itself is certified by TUV safety protection comes to SIL3 level. The system uses dual channel self-diagnosis and other advanced monitoring method, which also has passed the testing from the Rhine technology (Shanghai) Co., LTD. Safety protection comes to SIL2 level, and getting CE certificate. The system mainly has the following features:

- Design according to the needs of SIL;

Multiple redundancy, monitoring of each input electric for every security monitoring (main
engine speed, escalator step missing monitor, handrail belt speed detection, etc.)
Superior system self testing,
Compatible with all kinds of system, PLC, PC board system, etc.;
Good electromagnetic compatibility EMC;

- Systematic solution making KOYO escalator control products more outstanding.

| KOYO ESCALATOR MATERIAL
- The Material of Inner and Outer Decking and Skirting

Comfort and Noble are the most light spot of KOYO escalator based on the stability and safety.


Stainless Steel
 Stainless Steel


Stainless Steel


Skirting with the
Hairline Teflon Finished
Stainless Steel Stainless Steel

- Handrail Color Option



## | KOYO ESCALATOR MATERIAL

- The Material Option of Truss


Truss/Painted Angle Steel

- Landing Plate


Punched Stainless Steel


Truss/Hot-dip Galvanizing

- Comb


Aluminum


Resin

- Safety Function Extended Board (PESSRAE)

- The Material Option of Outside Cladding


Glass

- Balustrade Lighting

- Skirting Lighting

- Skirting Brush

- Anti-Creeping Device

- Handrail Bracket



## STANDARD AND OPTIONAL FUNCTION




## OPTION FORM

For Escalator Specification

|  |  | Indoor |  | $\begin{array}{\|c\|} \hline \text { Outdoor } \\ \hline \begin{array}{c} \text { Commercial } \\ \text { Type } \end{array} \\ \hline \end{array}$ | Public Transport Type |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Slim } \\ & \text { Type } \end{aligned}$ | Commercial Type |  |  |
| Handrail Belt | Synthetic rubber (black) | $\triangle$ | - | $\triangle$ | - |
|  | Other colors | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
| Handrail Bracket | Hairline Stainless Steel | - |  |  |  |
|  | Aluminum Alloy |  | - | - | - |
| Balustrade Panel | Colorless Transparent Tempered Glass | $\triangle$ | $\triangle$ | - | - |
|  | Colored Transparent Tempered Glass | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Inclined Hairline Stainless Stee |  | $\triangle$ | $\triangle$ | $\triangle$ |
| Inner \& Outer Decking | Hairline Stainless Steel | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Teflon Rnished Steel Plate | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Teflon Rnished Stainless Steel | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
| Skirting | Hairline Stainless Steel | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Teflon Rnished Steel Plate | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Teflon Rnished Stainless Steel | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
| Step | Stainless Steel with yellow plastic frame | $\triangle$ | $\triangle$ |  |  |
|  | Aluminum with yellow painted frame | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Aluminum with yellow plastic frame | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
| Comb | Synthetic Resin (Yellow) | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Aluminum Alloy | $\triangle$ | $\triangle$ | $\triangle$ | - |
| Landing Plate | Punched Stainless Steel | $\triangle$ | $\triangle$ |  |  |
|  | Etching Stainless Steel | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Aluminum Alloy | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
| Truss | Painted Angle Steel | $\triangle$ | $\triangle$ |  |  |
|  | Hot-dip Galvanizing Angle Steel | $\triangle$ | $\triangle$ | $\triangle$ | - |
| Outside Cladding | Painted Steel (colors for choice) | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Hairline Stainless Steel | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |
|  | Tempered Glass | $\triangle$ | $\triangle$ | $\triangle$ | $\triangle$ |



ESCALATOR SPECIFICATIONS \& PARAMETERS

## - KYS/C 230 Commercial Escalator | Drawing



| Modle | KYS/C230-600 <br> 600 |  | KYS/C230-800 | KYS/C230-1000$1000$ |
| :---: | :---: | :---: | :---: | :---: |
| A.Step Wiath |  |  |  |  |
| B.Handrail Center Distance |  | 838/910 | 1038/1110 | 1238/1310 |
| c:WWidth of EscalatorD:Width of Pit |  | 1140/1200 | 1340/1400 | 1540/1600 |
|  |  |  | 1400/1460 |  |
| Step Width | Rise | Wight | Support toads |  |
|  | $\mathrm{H}(\mathrm{mm})$ | kN | ${ }_{\text {R1 } 1 \text { (kN) }}$ | ${ }^{\text {R2 } 2 \text { ( }}$ ( ${ }^{\text {a }}$ |
| 600 | 3000 | 57 | 46 | 41 |
|  | 3500 | 60 | 49 | 44 |
|  | 4000 | 64 | 52 | 47 |
|  | 4500 | 68 | 56 | 50 |
|  | 5000 | 71 | 59 | 53 |
|  | 5500 | 75 | 62 | 56 |
|  | 6000 | 79 | 65 | 59 |
| 800 | 3000 | 59 | 52 | 47 |
|  | 3500 | 63 | 56 | 50 |
|  | 4000 | 67 | 60 | 54 |
|  | 4500 | 71 | 64 | 57 |
|  | 5000 | 74 | 68 | 60 |
|  | 5500 | 82 | 74 | 66 |
|  | 6000 | 86 | 78 | 69 |
| 1000 | 3000 | 63 | 59 | 53 |
|  | 3500 | 67 | 64 | 57 |
|  | 4000 | 71 | 68 | 61 |
|  | 4500 | 75 | 73 | 65 |
|  | 5000 | 83 | 79 | 71 |
|  | 5500 | 87 | 84 | 75 |
|  | 6000 | 92 | 88 | 79 |



Remark:
. All dimensions are based on mm;
2. If add horizontal step in must add the horizonta
length correspondingly;
3. When the width of step $\mathrm{A}=600$, the truss must be
extended by 420 ;
. Pit depth will be 1450 for outdoor escalator

- KYS/C 235 Commercial Escalator | Drawing


| Mode |  | krs/c235.600 | KYS/C235-800 <br> 80 | KYS/C235-1000 <br> 1000 |
| :---: | :---: | :---: | :---: | :---: |
| A.Step Width |  |  |  |  |
| ${ }_{\text {A }}$ A.titandrail Center Distance |  | 600 $838 / 910$ | 1038/1110 | ${ }^{12381310}$ |
| c:WWidth of Escalator |  | 1140/1200 | 1390/1400 |  |
| D:Width of Pit |  |  | 1400/1460 | 1600/1660 |
| $\begin{aligned} & \text { Step Width } \\ & \hline A(m m) \end{aligned}$ | Rise | Wight | Support Loads |  |
|  | H(mm) |  |  |  |  |
| 600 | 3000 | 54 | 43 | 39 |
|  | 3500 | 57 | 46 | ${ }_{41}$ |
|  | 4000 | 60 | 49 | 44 |
|  | 4500 | 64 | 52 | 46 |
|  | 5000 | 67 | 54 | 49 |
|  | 5500 | 70 | 57 | 51 |
|  | 6000 | 73 | 60 | 54 |
| 800 | 3000 | 56 | 49 | 44 |
|  | 3500 | 60 | 52 | 47 |
|  | 4000 | 63 | 56 | 50 |
|  | 4500 | 66 | 59 | 53 |
|  | 5000 | 70 | 62 | 56 |
|  | 5500 | 73 | 65 | 59 |
|  | 6000 | 76 | 69 | 61 |
| 1000 | 3000 | 60 | 56 | 50 |
|  | 3500 | 64 | 60 | 53 |
|  | 4000 | 67 | 64 | 57 |
|  | 4500 | 71 | 67 | 60 |
|  | 5000 | 74 | 71 | 64 |
|  | 5500 | 82 | 77 | 69 |

Detail E (by others)


## Remark:

. All dimensions are based on mm ;
2. If add horizontal step in must add the horizonta length correspondingly;
. When the width of step $\mathrm{A}=600$, the truss must be extended by 420 ;
.Pit depth will be 1450 for outdoor escalator.

## - KYS/C 330 Commercial Escalator | Drawing



| ${ }_{\text {M.s.tep Width }}$ |  | krs/cr30-600 | KYS/C330-800 <br> 800 | KYS/C330-1000 <br> 1000 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| B.Handrail Center Distance |  | 838/910 | $1038 / 1110$ | ${ }_{12388 / 1310}$ |
| c :Wiath of fesalator |  | 1140/1200 | 1340/1400 | 1540/1600 |
| D WWidth of Pit |  |  | 1400/1460 | 1600/1660 |
| Step Width |  | Wight | Support Loads |  |
|  |  |  |  |  |  |
|  | $H(m m)$ | kN | R11 (NN) | $\mathrm{R}^{\text {2 (KN) }}$ |
| 600 | 3000 | 58 | 48 | 42 |
|  | 3500 | 61 | 51 | 45 |
|  | 4000 | 65 | 54 | 48 |
|  | 4500 | 68 | 57 | 51 |
|  | 5000 | 72 | 60 | 54 |
|  | 5500 | 75 | 63 | 57 |
|  | 6000 | 78 | 66 | 60 |
| 800 | 3000 | 61 | 55 | 49 |
|  | 3500 | 65 | 58 | 53 |
|  | 4000 | 68 | 62 | 56 |
|  | 4500 | 72 | 65 | 60 |
|  | 5000 | 76 | 69 | 63 |
|  | 5500 | 82 | 74 | 68 |
|  | 6000 | 86 | 78 | 72 |
| 1000 | 3000 | 65 | 62 | 56 |
|  | 3500 | 69 | 66 | 61 |
|  | 4000 | 73 | 70 | 65 |
|  | 4500 | 79 | 76 | 70 |
|  | 5000 | 83 | 80 | 74 |
|  | 5500 | 90 | 87 | 79 |
|  | 6000 | 94 | 91 | 83 |

Detail E (by others)
Detail M


## Remark:

. All dimensions are based on mm;
2. If add horizontal step in must add the horizonta
length correspondingly;
3. When the width of step $\mathrm{A}=600$, the truss must be
extended by 420 ;
. Pit depth will be 1450 for outdoor escalator

- KYXF/KYH 330 Public Transport Escalator | Drawing


| Mode | $\underset{\substack{\text { KrxF/KYH } \\ 330-600}}{ }$ | $\underbrace{330.800}_{\text {KrxF//KYY }}$ | $\underbrace{330-1000}_{\text {KryF//KYH }}$ |
| :---: | :---: | :---: | :---: |
| A.step Width | 600 | 800 | 1000 |
| B:Handrai Center Distance | 838 | 1038 | 1238 |
| c:Width of Escalator | 1200 | 1400 | 1600 |
| D:Width of Pit | 1260 | 1460 | 1660 |
| Step Width | 600 | 800 | 1000 |
| ${ }_{\text {R1 ( }}^{\text {(N) }}$ | 4.1142+15.5 | 4.5×<2+16.1 | $5 \times 12+17.5$ |
| R2 (kN) | $4.1 \times 1+7.8$ | 4.55x1+7.8 | $5 \times 1+8.5$ |
| ${ }^{\text {R33 (kN) }}$ | 4.55x+9.5 | 4.5×1+10.5 | $5.2 \times 1+1.5$ |
| Remars | Unit for L/L1/L2 is m, L1/ LL2 are less than 15m |  |  |

1. All dimensions are based on mm ;
. If add horizontal step in must add the
horizontal length correspondingly;
2. When the width of step $A=600$, the truss must be extended by 420;
3. Pit depth will be 1500 for outdoor escalator.

## - KYXF/KYH 323 Public Transport Escalator | Drawing



| Modle | $\underset{\substack{\text { KxXFF/KYH } \\ 333.600}}{ }$ | $\begin{gathered} \text { krxf/F/KYH } \\ 330-800 \end{gathered}$ | $\underset{\substack{\text { KXXF/KYH } \\ 330.1000}}{ }$ |
| :---: | :---: | :---: | :---: |
| A.Step Wiath | 600 | 800 | 1000 |
| B:Handrail Center Distance | 838 | 1038 | 1238 |
| c :Width of Escalator | 1200 | 1400 | 1600 |
| D:Width of Pit | 1260 | 1460 | 1660 |


| Step Width | 600 | 800 | 1000 |
| :---: | :---: | :---: | :---: |
| R1 1 KN) | 4.11<2 2 +19.5 | 4.5×12+20.1 | $5 \times 12+21.5$ |
| ${ }^{\text {R2 } 2(1 \mathrm{NN})}$ | 4.11x1+11.8 | 4.5× $51+111.8$ | ${ }_{5 \times 11+12.5}$ |
| R3 (KN) | 4.25x $1+13.5$ | $4.5 \times 1+15.5$ | 5.2x+115.5 |
| Remark | Unit for L L | 11 120 | than 15m |

## Remark:

1. All dimensions are based on mm ;
2. If add horizontal step in must add the
horizontal length correspondingly;
3. When the width of step $\mathrm{A}=600$, the truss must
be extended by 420 ;
. Pit depth will be 1500 for outdoor escalator

- KYXF/KYH 327 Public Transport Escalator | Drawing


## Rise:

Max. 15000
Incline
Horizontal Steps
Horizontal Steps
3
Step Width : 600/800/1000


Detail E (by others)
Detail N
Detaii $M$


## emark

. All dimensions are based on mm
2. If add horizontal step in must add the
horizontal length correspondingly;
3. When the width of step $A=600$, the truss must
be extended by 420 ;
4. Pit depth will be 1500 for outdoor escalator

- KYPS12 Commercial Passenger Conveyor | Drawing
Rise:
Incline:
Incline:
$10^{\circ} 11^{\circ} 12^{\circ}$ Pallet Width 800/1000


| Modle | KYP512-800 | KYPS12-1000 |
| :---: | :---: | :---: |
| A:Palle Width | 800 | 1000 |
| 8.Handrail Center Distance | 1038 | 1238 |
| c:Wisth of Moving Walk | 1340 | 1540 |
| D:WWidh of Pit | 1400 | 1600 |


| Support Loads Parameter | q | M | N |
| :---: | :---: | :---: | :---: |
| 800 | 0.0039 | 9.5 | 4.5 |
|  | 1000 | 0.0045 | 11 |


| Inclination | Rise |  | Inte.support |  |
| :---: | :---: | :---: | :---: | :---: |
|  | from | To | ${ }^{\text {R3 (kN) }}$ | R4 (kN) |
| $10^{\circ}$ | 1297 | 2178 |  |  |
|  | 2179 | 4823 | 1 |  |
|  | 4824 | 6000 | 1 | 1 |
| $11{ }^{\circ}$ | 149 | 2420 |  |  |
|  | 2421 | 5335 | 1 |  |
|  | 5336 | 6000 | 1 | 1 |
| ${ }^{12}{ }^{\circ}$ | 1601 | 2663 |  |  |
|  | 2664 | 5851 | 1 |  |
|  | 5852 | 6000 | 1 | 1 |


|  | Single Inte. Support (KN) | Double Inte. Support (KN) |
| :---: | :---: | :---: |
| R1 $1 \times 1 \times+\mathrm{M}$ | R1= $13 \times \mathrm{q}+\mathrm{M}$ | R1=13x+M |
|  | R2=L1 $1 \times+N$ | R2=11 $1 \times+N$ |
| R2=1< ${ }^{\text {a }}$ + | R3=[11+3) ${ }^{\text {a }}$. $3 \times 4$ | ${ }_{\substack{\text { a }}}^{\mathrm{R} 3=(12+12) \times 1.3 \times 9}$ |
| Note | Unit for $11 / 12 / 1 / 3$ re less than 15 m |  |

- KYPF12 Commercial Passenger Conveyor | Drawing

Rise:
Max. 8000 Incline: $10^{\circ} 11^{\circ} 12^{\circ}$ Pallet Width 800/1000





| Modle | KYPF12-800 | KYPF12-1000 |
| :---: | :---: | :---: |
| A:Palle Width | 800 | 1000 |
| 8.Handrail Center Distance | 1038 | 1238 |
| c:Wisth of Moving Wak | 1340 | 1540 |
| D:Width of Pit | 1400 | 1600 |



1. All dimensions are based
on mm ;
2. Pit depth will be 1450 for outdoor moving walk.

Detail M


Detail E (by others)


## KOYO ${ }^{\circ}$ Elevator

- KYPHO Public Transport Passenger Conveyor | Drawing

Horizontal Length
Max. 200 mm
Incline

## Pallet Width

800/1000






Detail M
Detail E (by others)


## Remark

1. All dimensions are based on mm ;
2. Pit depth will be 1450 for outdoor moving walk.
